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RESEARCH REPORT

SURVEY & ANALYSIS OF SALARY TRENDS 1988

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Survey and Analysis of Salary Trends, 1988

Foreword

This reference document supports state federations and locals in developing salary comparisons and formulating policy. While serving as the primary vehicle for reporting the results of the American Federation of Teachers annual survey of state departments of education, several other data sources are utilized, as noted in Appendix B. Data from the AFT's annual survey of local unions will be available at a later date.

Data include national average salaries or earnings for teachers, other school employees, government workers and professional employees over the past 25 years. In many instances, these data are reported by state, especially for recent years. Beginning salaries for teachers and other college graduates over the past 15 years are reported. The AFT's survey of state departments of education also asked states to provide information on minimum salaries, experienced teachers reentering the classroom, retirement rates and teacher age and experience. For the most part, data from the survey of state departments of education are reported as received from the states. In some instances, data were confirmed by telephone. Qualifications to the data, if any, are noted in Appendix A and in some tables. Many states are still refining data, and any changes reported to the AFT Research Department will be incorporated into next year's report. Updated data relating to last year's report has been incorporated into this document.

Comparisons with the various tables can be developed to suit the purposes of a particular local or state federation, whether it is to consider trends, establish the position of members relative to similar professionals, or make meaningful and valid comparisons among states. The first section of this report focuses on state comparisons. The second section highlights trends over time. The third section focuses on beginning teachers, with supplemental information on experienced teachers reentering the profession and teacher retirement.

The Department of Research staff is grateful to the various locals, state agencies and state agency employees that provided the information and suggestions for this report. Peggy Williams Smith of the Research Department staff collected, organized and entered data, prepared the manuscript and assisted in other aspects of this report. Helen Nemorin helped to collect data and to edit the report. Ian McDonald helped enter data.

Data used in this report and copies of the tables are available on microcomputer diskette and can be obtained by writing to the AFT Department of Research.

Highlights

State Comparisons

o The average teacher salary for 1987-88 of approximately $28,085 represents a 5.5 percent increase over the previous year's average salary of $26,615.

o Alaska had the highest average salary at $40,510, or 144 percent of the national average. South Dakota had the lowest average salary at $19,758, or just 70 percent of the national average.

o Connecticut reported the highest average salary increase -- 15.8 percent for 1987-88. Maine and Iowa posted 10 percent gains. Alaska reported a 3.7 percent average salary decline, and Wyoming, Alabama and Utah also posted declines. Delaware, Virginia, New Hampshire, Maine and Connecticut all reported increases of more than 18 percent over the past two years.

o Since the 1980-81 school year, the average teacher salary in Connecticut has improved by more than 90 percent, and in Vermont and Virginia, average salaries improved by 85 percent.

o An adjustment for interstate differences in the cost of living shows that Michigan, Alaska, California and Minnesota pay teachers the most. A similar adjustment places Louisiana, Arkansas, Hawaii and South Dakota on the bottom.

o Expenditures per pupil (from current funds) averaged $3,713 per pupil in 1986-87, ranging from a low of $2,242 in Utah to $6,792 in Alaska, with New York and New Jersey also spending more than $5,500 per pupil.

o According to 1983-84 U.S. Department of Education data on benefits, Oregon had the highest ratio of benefits to FTE employee earnings at 36.1 percent compared to the national average of 22.5 percent. Ten states had ratios in excess of 30 percent.

Trends Compared to Other Workers and Professions

o The 1987-88 average teacher salary of $28,085 is the highest-ever average salary, but just $650 more than the $27,420 (in 1988 dollars) average teacher salary recorded in 1972.

o In both 1956 and 1981, teacher salaries matched the mean annual earnings of the full-time worker in the U.S. economy, but teachers gained a 17 percent advantage by 1987 -- slightly above the 14 percent advantage they enjoyed 1971.

o Teachers earned 10 percent more than the average government worker in 1987, about the same as the 11 percent advantage they enjoyed in 1968 and 1969.

o The full-time, year-round male worker earned 14 percent more than the average teacher in 1987 -- the smallest gap in twenty years.

o Female full-time, year-round workers experienced increased earnings compared to teachers every year over the 1970s, but working women have gained less than teachers during the recent period of rapidly rising teacher salaries. The average earnings figure of women in 1987 falls short of the average teacher salary by 27 percent.

o While salaries in other white-collar occupations remain high compared to teachers (ranging from 95 percent more for attorneys to 20 percent more for accountants), the earnings advantage of these white-collar occupations is at the lowest level since the early 1980s and is lower than in 1962. In 1987, the salary growth of full professors at public, doctoral institutions outpaced the average salary increase of teachers, but assistant professors continued their slide and now make about as much as the average public school teacher.

o Teacher salaries rose about the same as administrator salaries during the 1987-88 school year, more slowly than secretaries, but faster than the rate of increase for hourly workers.

Beginning Teachers

o The average beginning teacher salary of $18,557 in 1987-88 rose 5.4 percent from the previous year compared to the average teacher salary increase of 5.5 percent.

o Alaska, California, Connecticut, Michigan, New York and New Jersey have starting salaries in excess of $20,000, while only Vermont and Idaho report average starting salaries below $15,000.

o While beginning offers in business for new college graduates remained high compared to beginning teachers in 1987 (ranging from 55 percent more for engineers to 10 percent more for liberal arts graduates), the earnings advantage of these white-collar occupations was at the lowest level since about 1980.

o Beginning offer data for 1988 college graduates indicates starting salaries will rise for accountants by 8 percent, for sales/marketing occupations by 13 percent, and for liberal arts graduates by 10 percent.

o Beginning teachers comprised approximately 4.0 percent of the classroom teacher work force in 1985-86 (38 states reporting data), as much as 3.4 percent in 1986-87 (33 states reporting data), and about 3.1 percent in 1987-88 (28 states reporting data.

o Based on data from 20 states, the number of experienced teachers reentering the classroom exceeded the number of beginning teachers in both 1986-87 (3.5 percent) and 1987-88 (also 3.5 percent).

o The retirement rate (which includes non-teaching professional personnel in some states), ranging from a high of 4.6 percent of classroom teachers in Louisiana to a low of 1.3 percent in North Dakota averaged 2.2 percent for 28 states reporting data in 1986-87.

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I. STATE COMPARISONS

Developments in Teacher Salaries, 1987-88. In 1987-88, the average public elementary and secondary school teacher in the United States earned a salary of approximately $28,085, an increase of 5.5 percent over the previous year. Not unexpectedly, Alaska had the highest average salary at $40,510 followed by the District of Columbia with $34,705. As shown in Table I-1, New York, Michigan, Connecticut, California and Rhode Island all had average salaries over $32,000 -- about 15 to 25 percent above the national average. South Dakota ranked last with an average salary of $19,758. Mississippi and Arkansas also had average salaries below $21,000. Beginning teachers in six states averaged more than $20,000 (See Table III-1).

Connecticut reported the highest salary increase--15.8 percent for 1987-88 (see Table I-2). The increase made Connecticut one of the five highest-paying states. Maine and Iowa posted 10 percent gains. Maine moved from the 49th ranking in 1985-86 to the 40th ranking in 1987-88. The average declined by 3.7 percent in Alaska, by 1.3 percent in Alabama and by 1.1 percent in both Wyoming and Utah. Over the past two years, Connecticut, Delaware, Maine, Virginia and New Hampshire reported the greatest gains, ranging from 18.5 percent to 25.6 percent. Over the past two years, average salaries increased by less than 2 percent in Alaska, Alabama, Arkansas, Utah and Wyoming.

Gains During the 1980s. Seven-year trends appear in Table I-3. The average salary grew by more than 80 percent in Vermont, Virginia and Connecticut. Average salaries improved less than 40 percent over the seven-year span in Hawaii (35 percent), Washington (35 percent), Wyoming (37 percent) and Alaska (40 percent).

Teacher Salaries Compared to the Average Annual Earnings of All Workers. States vary considerably among each other according to their economic condition and the cost of living. Table I-4 compares the average teacher salary to the average annual earnings of all workers, including part-time workers, in the private sector. The annual pay data apply to workers covered by State and Federal Unemployment Insurance programs and are compiled from reports submitted by employers for more than 93 million workers. Generally excluded from unemployment insurance are most agriculture workers on small farms, railroad workers, most domestic employees, student workers and the self-employed. This comparison serves only as an index to adjust for unique conditions within each state and to facilitate interstate comparisons. It is not presented as a standard by which to judge how much teachers should get paid relative to the average worker.

As measured by the ratio of the average teacher salary in 1987-88 to the average annual earnings in the private sector in 1987, Rhode Island ranks first, with a ratio of 1.74 compared to the national average of 1.32. Several high-paying states, including New York, New Jersey, Michigan and the District of Columbia, fall to the middle. Twenty-eight states have a ratio of between 1.25 and 1.40. While some states argue that they cannot pay teachers well because the taxpayers in the state do not get paid well, states with the lowest average teacher salaries tend to rank lowest when teacher salaries are compared to the average worker. However, the state paying teachers the least, South Dakota, ranks 34th according to the ratio.

The ranking according to the ratio of the average teacher salary to private sector employee earnings for 1981 is shown as the last column of Table I-4. The rankings of several states changed dramatically over the intervening six years. Massachusetts and Illinois fell about 20 positions. Alaska, Virginia and Tennessee gained the most in the rankings.

Teacher Salaries Compared to Per Capita Personal Income. Table I-5 is constructed similarly to Table I-4, except that teacher salaries are compared to per capita personal income in the state. Personal income is a combination of earnings in the workplace, minus contributions for social insurance, plus dividends, interest, rent and transfer payments. Per capita income varies among states because of cost-of-living differences, differing concentrations of poor people and demographic factors (e.g., families are large in Utah, thus driving down per capita income). Again, the comparison to personal income is only an index designated to enhance interstate comparison, not a standard by which to judge how much teachers should be paid. Because 1987-88 average teacher salaries are compared to 1987 per capita personal income, the ratio of the two measures slightly overstates how much teachers earn relative to the per capita income.

The national average of the teacher salary to the per capita personal income ratio is 1.83, down from 1.85 in 1986-87, but well above the ratio of 1.65 in 1981. A total of 31 states had a ratio of between 1.70 and 2.00. Alaska and Michigan, and Wyoming have the highest ratios, but 5 states paying teachers less than the national average -- New Mexico, Utah, Alabama, South Carolina, and Mississippi -- rank in the top 10. Several high paying states -- Connecticut, New Jersey, Massachusetts and Virginia -- rank in the bottom 10.

Teacher Salaries Adjusted by the AFT Cost-of-Living-Index. While the greatest variation in cost-of-living occurs within a state between rural and urban locations, a cost of living adjustment among states makes sense when states serve as

the basis of comparing earnings. Cost-of-living variations among states are considered in adjusting and re-ranking the average teacher salary displayed in Table I-6.

The interstate cost-of-living index was developed by the AFT Research Department using existing data on the cost of living in a majority of the nation's SMSAs to develop cost-of- living indices for each state. Using regression techniques, models for each of four regions were developed to explain differences in the cost-of-living between SMSAs. The regressions coefficients were then used as weights and combined with comparable state level data to establish the state cost-of- living index. The state cost of living index was normalized so that 1.00 represents the national average for all states weighted by their population. Details of the index and the methodology are available from the AFT Research Department. The 1987 versions of this report contained a similar cost-of-living index developed by Walter W. McMahon and Carrol Melton ("Measuring Cost of Living Variation," Industrial Relations, Vol. 17, No. 3, 1978 p. 331).

Alaska, the District of Columbia, Michigan, Rhode Island and Texas rank as the highest-paying states after adjusting for the cost of living. New York, Pennsylvania and California, despite relatively high indexes, still list in the top 10. High-paying Maryland, Massachusetts and New Jersey drop substantially in the rankings. New Hampshire, South Dakota and Vermont remain at the bottom. The rankings of most southern states improve when the cost-of-living variation is accounted for.

Expenditures per Pupil in 1986-87. During 1986-87, approximately $3,713 in current funds (a figure excluding debt service and bond and construction expenses) were spent on each enrolled pupil (measured by October 1 membership or comparable figure) in the typical state. Most of the estimates in Table I-7 are based on actual data reported by states but are adjusted to reflect the definition of expenditure per pupil reported by the U.S. Department of Education. As shown in Table I-7, Alaska spent an estimated 84 percent more than the national average, followed by New York, New Jersey, Connecticut, the District of Columbia and Wyoming, each spending at least 40 percent more than the national average. Utah, Mississippi and Kentucky spent under $2,500 per pupil. State rankings for per pupil expenditures and average teacher salary did not always match closely. Wyoming, for example, ranked 20th on average teacher salary but 6th on expenditures per pupil. California ranked 19th on expenditures per pupil, but the state has the 6th highest average teacher salary.

Regional Rankings. Perhaps the most common way to improve interstate comparisons is to make comparisons within the same region, as in Table I-8. Figured this way, Connecticut

paid the most in New England; Washington DC topped the Mideast; Michigan paid the most in the Great Lakes area; Minnesota ranked first among Plains states (and would rank second if put in the Great Lakes region); Virginia topped the Southeast; Arizona ranked highest in the Southwest; Colorado outpaced Wyoming in the Rocky Mountain region; and, excluding Alaska, California easily ranked highest in the Far West.

Teacher Benefits by State One of the few state-by-state calculations of benefits for school district employees was published by the U.S. Department of Education in 1987 for the 1983-84 school year. These figures are listed for 49 states in the first column of Table I-9. Since the Department of Education's data sometimes exclude payments made directly by state governments to teacher retirement funds, adjustments were made to the benefit figures in Alaska, Texas, Kentucky, Missouri and Mississippi to reflect the approximate value of employer contributions to retirement funds payments. Other states may direct some state subsidies to the teacher retirement system that do not flow through school district budgets and consequently may be omitted. The Department of Education's benefits data are expressed as benefits per FTE employee, not benefits per teacher. Since the Department of Education does not collect salary and earnings data, the FTE employee earnings figures were taken from the 1983 Census of Government October payroll data. The average teacher benefits column assumes that benefits as a proportion of their salary is the same as the percentage of FTE employee earnings going toward benefits. In states where non-teaching employees get few benefits relative to teachers, teacher benefits may be underestimated in Table I-9.

Oregon, Pennsylvania and Connecticut had benefit levels equal to at least one-third of earnings in 1983-84, although the benefits level in the average state was 22.5 percent of earnings. When benefits were added to salary to determine the total compensation level, Maryland, Oregon, Pennsylvania and Connecticut moved towards the top of the rankings while California and Wyoming fell out of the top ten.

TABLE I-1

THE AVERAGE TEACHER SALARY IN 1987-88, STATE RANKINGS

Rank	State	Average Salary		Percent of U.S. Average
1	Alaska	$40,510		144.2%
2	D.C.	34,705		123.6%
3	New York	34,300	ac	122.1%
4	Michigan	34,050	b	121.2%
5	Connecticut	33,776		120.3%
6	California	33,200	a	118.2%
7	Rhode Island	32,858	a	117.0%
8	Maryland	30,933		110.1%
9	Massachusetts	30,800	b	109.7%
10	New Jersey	30,788	a	109.6%
11	Minnesota	29,756	a	105.9%
12	Illinois	29,716	a	105.8%
13	Delaware	29,573		105.3%
14	Wisconsin	29,206		104.0%
15	Pennsylvania	29,177		103.9%
16	Colorado	28,651		102.0%
17	Hawaii	28,445		101.3%
18	Oregon	28,080		100.0%
19	Washington	27,960	a	99.6%
20	Wyoming	27,926		99.4%
21	Ohio	27,606		98.3%
22	Nevada	27,599		98.3%
23	Virginia	27,436	a	97.7%
24	Arizona	27,388		97.5%
25	Indiana	27,067	a	96.4%
26	Georgia	25,736		91.6%
27	Texas	25,387	b	90.4%
28	Florida	25,198		89.7%
29	North Carolina	25,073	a	89.3%
30	Iowa	24,867		88.5%
31	Tennessee	24,748		88.1%
32	Missouri	24,704		88.0%
33	Kansas	24,647		87.8%
34	New Mexico	24,523	a	87.3%
35	Vermont	24,507		87.3%
36	Kentucky	24,274		86.4%
37	South Carolina	24,241		86.3%
38	New Hampshire	24,019		85.5%
39	Montana	23,774		84.7%
40	Maine	23,425		83.4%
41	Alabama	23,201	a	82.6%
42	Oklahoma	23,100	a	82.3%
43	Nebraska	22,995	b	81.9%
44	Utah	22,783	a	81.1%
45	Idaho	22,242		79.2%
46	West Virginia	21,736		77.4%
47	North Dakota	21,660		77.1%
48	Louisiana	21,209		75.5%
49	Mississippi	20,750	a	73.9%
50	Arkansas	20,340		72.4%
51	South Dakota	19,758		70.4%
	U.S. Average	$28,085		100.0%
	Guam	27,713		98.7%
	Puerto Rico	11,700		41.7%
	Virgin Islands	18,682		66.5%

a=estimate or preliminary; b=AFT estimate; c=median

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TABLE I-2

TRENDS IN THE AVERAGE TEACHER SALARY, 1985-86 TO 1987-88

State	Average Salary 1985-86	Rank	Average Salary 1986-87	Rank	Average Salary 1987-88	Rank	-----Percent Change----- 1985-86 to 1986-87	1986-87 to 1987-88	1985-86 to 1987-88
Alaska	$41,647	1	$42,063	1	$40,510	1	1.0%	-3.7%	-2.7%
D.C.	32,166	2	33,797	2	34,705	2	5.1%	2.7%	7.9%
New York	30,490	3	32,000	3	34,300	3	5.0%	7.2%	12.5%
Michigan	30,088	4	31,528	4	34,050	4	4.8%	8.0%	13.2%
Connecticut	26,898	11	29,170	7	33,776	5	8.4%	15.8%	25.6%
California	29,801	5	31,276	5	33,200	6	4.9%	6.2%	11.4%
Rhode Island	29,470	6	31,079	6	32,858	7	5.5%	5.7%	11.5%
Maryland	26,800	12	28,893	9	30,933	8	7.8%	7.1%	15.4%
Massachusetts	26,496	13	28,922	8	30,800	9	9.2%	6.5%	16.2%
New Jersey	27,170	9	28,718	10	30,788	10	5.7%	7.2%	13.3%
Minnesota	27,360	8	28,339	11	29,756	11	3.6%	5.0%	8.8%
Illinois	26,926	10	28,212	13	29,716	12	4.8%	5.3%	10.4%
Delaware	24,624	22	27,467	15	29,573	13	11.5%	7.7%	20.1%
Wisconsin	26,347	14	27,815	14	29,206	14	5.6%	5.0%	10.9%
Pennsylvania	25,853	17	27,422	16	29,177	15	6.1%	6.4%	12.9%
Colorado	25,892	16	27,387	17	28,651	16	5.8%	4.6%	10.7%
Hawaii	25,765	18	26,093	22	28,445	17	1.3%	9.0%	10.4%
Oregon	25,664	19	26,691	20	28,080	18	4.0%	5.2%	9.4%
Washington	26,210	15	27,285	18	27,960	19	4.1%	2.5%	6.7%
Wyoming	27,461	7	28,230	12	27,926	20	2.8%	-1.1%	1.7%
Ohio	24,988	21	26,288	21	27,606	21	5.2%	5.0%	10.5%
Nevada	25,606	20	26,962	19	27,599	22	5.3%	2.4%	7.8%
Virginia	23,095	26	25,041	25	27,436	23	8.4%	9.6%	18.8%
Arizona	23,931	25	25,972	23	27,388	24	8.5%	5.5%	14.4%
Indiana	24,225	24	25,616	24	27,067	25	5.7%	5.7%	11.7%
Georgia	23,046	27	24,632	27	25,736	26	6.9%	4.5%	11.7%
Texas	24,458	23	24,890	26	25,387	27	1.8%	2.0%	3.8%
Florida	22,250	34	23,833	29	25,198	28	7.1%	5.7%	13.2%
North Carolina	22,340	33	23,775	30	25,073	29	6.4%	5.5%	12.2%
Iowa	21,690	37	22,615	39	24,867	30	4.3%	10.0%	14.6%
Tennessee	21,384	39	23,526	31	24,748	31	10.0%	5.2%	15.7%
Missouri	21,945	36	23,435	34	24,704	32	6.8%	5.4%	12.6%
Kansas	22,596	30	23,459	33	24,647	33	3.8%	5.1%	9.1%
New Mexico	21,982	35	24,155	28	24,523	34	9.9%	1.5%	11.6%
Vermont	20,796	43	23,089	37	24,507	35	11.0%	6.1%	17.8%
Kentucky	20,948	41	22,467	41	24,274	36	7.3%	8.0%	15.9%
South Carolina	21,595	38	23,201	36	24,241	37	7.4%	4.5%	12.3%
New Hampshire	20,263	47	21,869	42	24,019	38	7.9%	9.8%	18.5%
Montana	22,916	29	23,340	35	23,774	39	1.9%	1.9%	3.7%
Maine	19,583	49	21,257	47	23,425	40	8.5%	10.2%	19.6%
Alabama	23,040	28	23,500	32	23,201	41	2.0%	-1.3%	0.7%
Oklahoma	22,458	32	22,563	40	23,100	42	0.5%	2.4%	2.9%
Nebraska	20,669	44	21,797	43	22,995	43	5.5%	5.5%	11.3%
Utah	22,553	31	23,035	38	22,783	44	2.1%	-1.1%	1.0%
Idaho	20,971	40	21,476	44	22,242	45	2.4%	3.6%	6.1%
West Virginia	20,627	45	21,446	45	21,736	46	4.0%	1.4%	5.4%
North Dakota	20,816	42	21,284	46	21,660	47	2.2%	1.8%	4.1%
Louisiana	20,303	46	21,196	48	21,209	48	4.4%	0.1%	4.5%
Mississippi	18,472	50	19,448	50	20,750	49	5.3%	6.7%	12.3%
Arkansas	19,965	48	19,904	49	20,340	50	-0.3%	2.2%	1.9%
South Dakota	18,095	51	18,781	51	19,758	51	3.8%	5.2%	9.2%
U.S. Average	$25,260		$26,615		$28,085		5.4%	5.5%	11.2%

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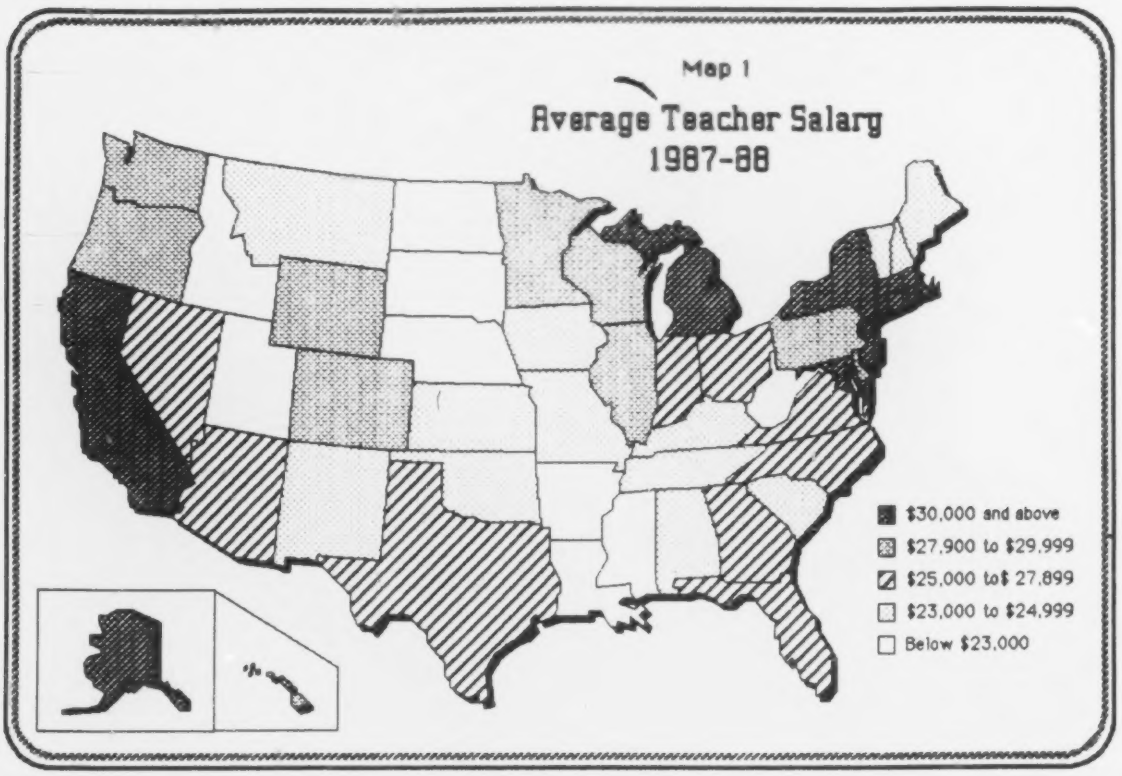
TABLE I-3

AVERAGE TEACHER SALARIES FOR 1980-81, AND 1987-88

State	Average Salary		Rank		Percent of U.S. Average		Change 1980-81 to 1987-88
	1980-81	1987-88	1980-81	1987-88	1980-81	1987-88	
Alabama	$15,150	$23,201	36	41	87%	83%	53.1%
Alaska	29,000	40,510	1	1	167%	144%	39.7%
Arizona	17,359	27,388	21	24	100%	98%	57.8%
Arkansas	13,270	20,340	49	50	76%	72%	53.3%
California	19,648	33,200	9	6	113%	118%	69.0%
Colorado	17,734	28,651	16	16	102%	102%	61.6%
Connecticut	17,440	33,776	20	5	100%	120%	93.7%
Delaware	18,625	29,573	12	13	107%	105%	58.8%
D.C.	22,823	34,705	2	2	131%	124%	52.1%
Florida	15,404	25,198	34	28	89%	90%	63.6%
Georgia	15,444	25,736	32	26	89%	92%	66.6%
Hawaii	20,993	28,445	5	17	121%	101%	35.5%
Idaho	15,146	22,242	37	45	87%	79%	46.9%
Illinois	19,518	29,716	10	12	112%	106%	52.2%
Indiana	16,878	27,067	24	25	97%	96%	60.4%
Iowa	16,150	24,867	27	30	93%	89%	54.0%
Kansas	15,250	24,647	35	33	88%	88%	61.6%
Kentucky	15,580	24,274	31	36	90%	86%	55.8%
Louisiana	14,900	21,209	39	48	86%	76%	42.3%
Maine	13,994	23,425	47	40	81%	83%	67.4%
Maryland	19,286	30,933	11	8	111%	110%	60.4%
Massachusetts	18,288	30,800	15	9	105%	110%	68.4%
Michigan	21,057	34,050	4	4	121%	121%	61.7%
Minnesota	17,182	29,756	22	11	99%	108%	73.2%
Mississippi	13,000	20,750	51	49	75%	74%	59.6%
Missouri	15,422	24,704	33	32	89%	88%	60.2%
Montana	15,967	23,774	28	39	92%	85%	48.9%
Nebraska	14,675	22,995	41	43	85%	82%	56.7%
Nevada	17,700	27,599	17	22	102%	98%	55.9%
New Hampshire	14,109	24,019	44	38	81%	86%	70.2%
New Jersey	18,300	30,788	14	10	105%	110%	68.2%
New Mexico	16,944	24,523	23	34	98%	87%	44.7%
New York	21,316	34,300	3	3	123%	122%	60.9%
North Carolina	15,858	25,073	29	29	91%	89%	58.1%
North Dakota	14,881	21,660	40	47	86%	77%	45.6%
Ohio	16,200	27,606	26	21	93%	98%	70.4%
Oklahoma	14,640	23,100	43	42	84%	82%	57.8%
Oregon	18,500	28,080	13	18	107%	100%	51.8%
Pennsylvania	17,690	29,177	18	15	102%	104%	64.9%
Rhode Island	19,803	32,858	8	7	114%	117%	65.9%
South Carolina	14,108	24,241	45	37	81%	86%	71.8%
South Dakota	13,636	19,758	48	51	79%	70%	44.9%
Tennessee	14,073	24,748	46	31	81%	88%	75.9%
Texas	15,715	25,387	30	27	91%	90%	61.5%
Utah	16,612	22,783	25	44	96%	81%	37.1%
Vermont	13,235	24,507	50	35	76%	87%	85.2%
Virginia	14,649	27,436	42	23	84%	98%	87.3%
Washington	20,702	27,960	6	19	119%	100%	35.1%
West Virginia	14,948	21,736	38	46	86%	77%	45.4%
Wisconsin	17,600	29,206	19	14	101%	104%	65.9%
Wyoming	20,438	27,926	7	20	118%	99%	36.6%
U.S. Average	$17,364	$28,085			100%	100%	61.7%


Map 1
Average Teacher Salary
1987-88
$30,000 and above
$27,900 to $29,999
$25,000 to$ 27,899
$23,000 to $24,999
Below $23,000

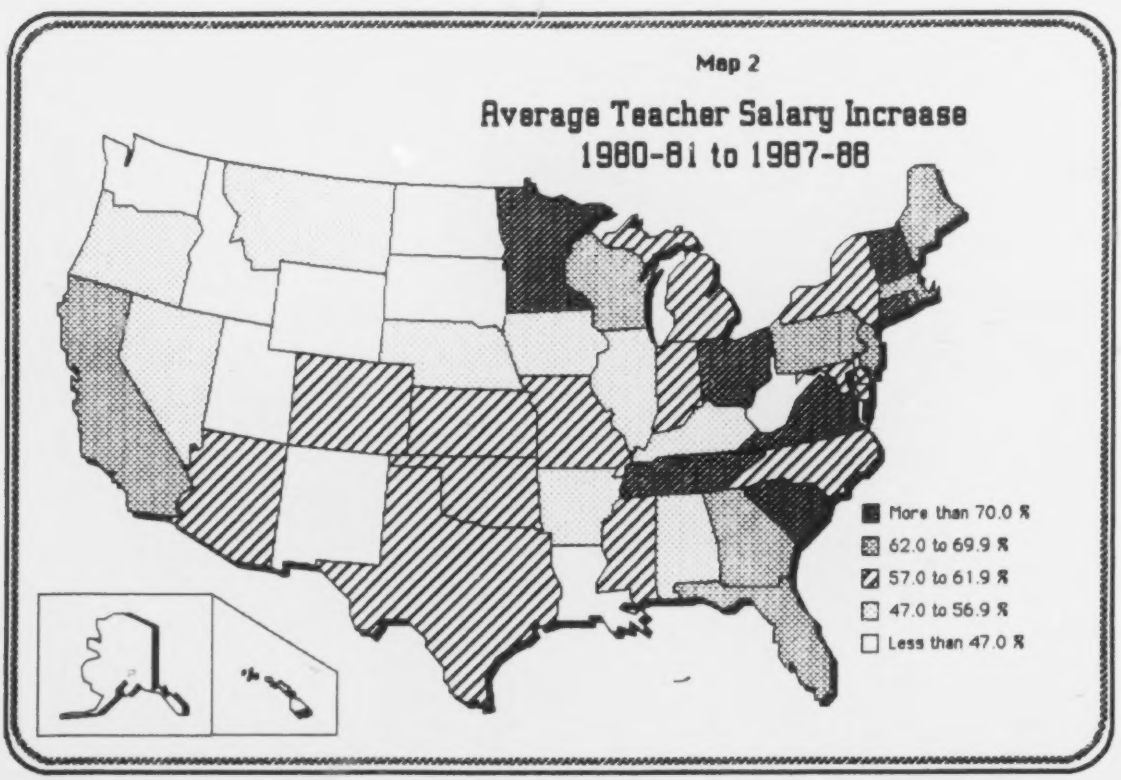

Map 2
Average Teacher Salary Increase
1980-81 to 1987-88
More than 70.0 %
62.0 to 69.9 %
57.0 to 61.9 %
47.0 to 56.9 %
Less than 47.0 %

TABLE I-4

AVERAGE TEACHERS SALARY IN 1987-88 COMPARED TO ANNUAL EARNINGS IN THE PRIVATE SECTOR IN 1987

	Annual Earnings		Ratio of Teachers To Private Sector	Rank		
	Teachers	Private Sector		1988	1987	1981
Rhode Island	$32,858	$18,896	1.74	1	1	2
Hawaii	28,445	17,867	1.59	2	5	1
Wisconsin	29,206	18,957	1.54	3	3	3
Maryland	30,933	20,628	1.50	4	7	4
Alaska	40,510	27,209	1.49	5	2	24
Montana	23,774	16,125	1.47	6	4	13
Oregon	28,080	19,073	1.47	7	9	10
Nevada	27,599	19,025	1.45	8	11	15
Minnesota	29,756	20,693	1.44	9	10	19
Arizona	27,388	19,242	1.42	10	19	16
Iowa	24,867	17,490	1.42	11	24	22
Michigan	34,050	23,956	1.42	12	18	18
D.C	34,705	25,505	1.42	13	12	5
New Mexico	24,523	17,321	1.42	14	8	11
South Carolina	24,241	17,146	1.41	15	22	32
Virginia	27,436	19,555	1.40	16	20	41
Wyoming	27,926	19,931	1.40	17	6	14
New York	34,300	24,494	1.40	18	23	6
Pennsylvania	29,177	20,869	1.40	19	15	21
Washington	27,960	20,060	1.39	20	14	7
North Carolina	25,073	18,005	1.39	21	16	9
California	33,200	23,937	1.39	22	13	12
Florida	25,198	18,352	1.37	23	27	23
Nebraska	22,995	16,791	1.37	24	21	28
Indiana	27,067	19,848	1.36	25	33	38
Vermont	24,507	17,988	1.36	26	26	44
Delaware	29,573	21,796	1.36	27	34	26
Tennessee	24,748	18,257	1.36	28	40	45
Maine	23,425	17,300	1.35	29	43	25
North Dakota	21,660	16,090	1.35	30	25	33
Colorado	28,651	21,349	1.34	31	17	30
Massachusetts	30,800	23,146	1.33	32	28	8
Connecticut	33,776	25,425	1.33	33	36	39
South Dakota	19,758	14,916	1.32	34	32	17
Kentucky	24,274	18,357	1.32	35	37	37
Ohio	27,606	20,926	1.32	36	30	46
Idaho	22,242	16,899	1.32	37	38	35
Illinois	29,716	22,990	1.29	38	42	20
Kansas	24,647	19,078	1.29	39	35	40
Georgia	25,736	19,921	1.29	40	41	34
Mississippi	20,750	16,125	1.29	41	45	44
New Jersey	30,788	24,095	1.28	42	44	29
Alabama	23,201	18,295	1.27	43	29	31
Utah	22,783	18,337	1.24	44	39	27
Missouri	24,704	20,160	1.23	45	48	46
Arkansas	20,340	16,601	1.23	46	46	42
Texas	25,387	20,987	1.21	47	31	48
Oklahoma	23,100	19,100	1.21	48	47	50
New Hampshire	24,019	19,950	1.20	49	50	36
West Virginia	21,736	19,689	1.10	50	49	49
Louisiana	21,209	19,350	1.10	51	51	51
U.S. Average	$28,085	$21,234	1.32			

AFT 1988 Teacher Salary Survey

TABLE I-5

AVERAGE TEACHERS SALARY IN 1987-88 COMPARED TO PER CAPITA PERSONAL INCOME IN 1987

State	Average Teacher Salary	Per Capita Personal Income	Ratio of Salary to Per Capita Income			Rank		
			1988	1987	1981	1988	1987	1981
Alaska	$40,510	$17,886	2.26	2.37	1.94	1	1	4
Michigan	34,050	15,330	2.22	2.25	2.01	2	2	1
Wyoming	27,926	12,759	2.19	2.13	1.69	3	5	22
Rhode Island	32,858	15,355	2.14	2.12	1.93	4	6	5
New Mexico	24,523	11,673	2.10	2.17	1.93	5	3	6
South Carolina	24,241	11,858	2.04	2.08	1.73	6	8	17
Mississippi	20,750	10,204	2.03	2.04	1.78	7	11	15
Kentucky	24,274	11,950	2.03	2.02	1.82	8	14	13
Utah	22,783	11,246	2.03	2.14	1.99	9	4	2
Oregon	28,080	13,887	2.02	2.02	1.86	10	13	9
Wisconsin	29,206	14,659	1.99	2.04	1.95	11	9	3
West Virginia	21,736	10,959	1.98	2.04	1.78	12	10	14
Alabama	23,201	11,780	1.97	2.11	1.84	13	7	11
Indiana	27,067	13,834	1.96	1.95	1.71	14	18	21
Arizona	27,388	14,030	1.95	1.96	1.77	15	16	16
Pennsylvania	29,177	14,997	1.95	1.97	1.71	16	15	20
Tennessee	24,748	12,738	1.94	1.91	1.65	17	22	29
Montana	23,774	12,255	1.94	2.03	1.73	18	12	18
North Carolina	25,073	13,155	1.91	1.94	1.83	19	19	12
New York	34,300	18,055	1.90	1.87	1.87	20	26	8
Ohio	27,606	14,543	1.90	1.95	1.58	21	17	34
Minnesota	29,756	15,783	1.89	1.92	1.60	22	21	33
Idaho	22,242	11,820	1.88	1.88	1.69	23	25	23
California	33,200	17,661	1.88	1.86	1.62	24	27	30
Louisiana	21,209	11,362	1.87	1.79	1.56	25	35	36
Hawaii	28,445	15,336	1.85	1.78	1.89	26	37	7
Oklahoma	23,100	12,520	1.85	1.82	1.42	27	31	45
Texas	25,387	13,764	1.84	1.93	1.45	28	20	44
Georgia	25,736	14,098	1.83	1.86	1.72	29	28	19
Delaware	29,573	16,238	1.82	1.83	1.68	30	30	24
Illinois	29,716	16,347	1.82	1.83	1.68	31	29	25
Washington	27,960	15,444	1.81	1.88	1.84	32	24	10
Colorado	28,651	15,862	1.81	1.81	1.55	33	32	37
Arkansas	20,340	11,343	1.79	1.89	1.66	34	23	28
Iowa	24,867	14,191	1.75	1.71	1.54	35	41	38
Maryland	30,933	17,722	1.75	1.74	1.67	36	38	27
Vermont	24,507	14,061	1.74	1.80	1.47	37	33	43
Nevada	27,599	15,958	1.73	1.79	1.51	38	34	41
D.C.	34,705	20,303	1.71	1.78	1.68	39	36	26
Maine	23,425	13,720	1.71	1.67	1.62	40	42	32
Missouri	24,704	14,537	1.70	1.72	1.57	41	40	35
Virginia	27,436	16,322	1.68	1.66	1.38	42	44	47
North Dakota	21,660	13,061	1.66	1.73	1.38	43	39	48
Florida	25,198	15,241	1.65	1.67	1.48	44	43	42
Kansas	24,647	14,952	1.65	1.63	1.38	45	46	49
Massachusetts	30,800	18,926	1.63	1.63	1.62	46	45	31
Connecticut	33,776	20,980	1.61	1.55	1.35	47	50	51
Nebraska	22,995	14,341	1.60	1.58	1.40	48	48	46
South Dakota	19,758	12,511	1.58	1.58	1.51	49	47	40
New Jersey	30,788	20,067	1.53	1.57	1.52	50	49	39
New Hampshire	24,019	17,123	1.40	1.37	1.37	51	51	50
U.S. Average	$28,085	$15,340	1.83	1.83	1.65			

AFT 1988 Teacher Salary Survey

TABLE I-6

STATE RANKINGS BY 1987-88 AVERAGE TEACHER SALARY ADJUSTED BY THE AFT INTERSTATE COST-OF-LIVING INDEX

State	Average Salary	Cost of Living Index*	Index Rank	Adjusted Average Salary	Adjusted Rank	Original Rank
Michigan	$34,050	0.94	27	$36,128	1	4
Alaska	40,510	1.23	3	33,042	2	1
California	33,200	1.06	11	31,243	3	6
Minnesota	29,756	0.96	21	30,905	4	11
Illinois	29,716	0.96	19	30,839	5	12
Wisconsin	29,206	0.96	22	30,449	6	14
Rhode Island	32,858	1.08	10	30,327	7	7
New York	34,300	1.13	7	30,269	8	3
Oregon	28,080	0.93	32	30,050	9	18
Indiana	27,067	0.92	37	29,443	10	25
Ohio	27,606	0.94	28	29,307	11	21
Wyoming	27,926	0.96	23	29,143	12	20
Pennsylvania	29,177	1.02	14	28,690	13	15
Washington	27,960	0.98	16	28,525	14	19
Virginia	27,436	0.96	20	28,493	15	23
Colorado	28,651	1.01	15	28,452	16	16
Arizona	27,388	0.97	18	28,170	17	24
Connecticut	33,776	1.22	4	27,690	18	5
D.C.	34,705	1.26	2	27,561	19	2
Maryland	30,933	1.13	8	27,491	20	8
Georgia	25,736	0.94	26	27,306	21	26
Missouri	24,704	0.91	48	27,243	22	32
Kansas	24,647	0.91	43	26,947	23	33
Texas	25,387	0.95	25	26,838	24	27
Iowa	24,867	0.93	34	26,815	25	30
North Carolina	25,073	0.94	31	26,797	26	29
Tennessee	24,748	0.93	35	26,754	27	31
Vermont	24,507	0.92	41	26,741	28	35
New Mexico	24,523	0.92	39	26,709	29	34
Delaware	29,573	1.11	9	26,686	30	13
Nevada	27,599	1.04	13	26,609	31	22
Kentucky	24,274	0.92	38	26,413	32	36
Montana	23,774	0.90	50	26,336	33	39
Massachusetts	30,800	1.17	6	26,289	34	9
South Carolina	24,241	0.93	33	26,049	35	37
Florida	25,198	0.97	17	25,907	36	28
Maine	23,425	0.92	40	25,560	37	40
New Jersey	30,788	1.21	5	25,419	38	10
Alabama	23,201	0.91	44	25,378	39	41
Nebraska	22,995	0.92	42	25,110	40	43
Idaho	22,242	0.90	51	24,657	41	45
Utah	22,783	0.94	30	24,318	42	44
Oklahoma	23,100	0.95	24	24,206	43	42
North Dakota	21,660	0.91	45	23,780	44	47
West Virginia	21,736	0.92	36	23,546	45	46
Mississippi	20,750	0.91	46	22,846	46	49
New Hampshire	24,019	1.06	12	22,754	47	38
Louisiana	21,209	0.94	29	22,580	48	48
Arkansas	20,340	0.91	47	22,416	49	50
Hawaii	28,445	1.27	1	22,362	50	17
South Dakota	19,758	0.91	49	21,803	51	51
U.S. Average	$28,085	1.00		$28,107		

*Source (except Hawaii and Alaska): AFT Department of Research--contact deparment for technical paper explaining the methodology.

TABLE I-7

EXPENDITURES PER PUPIL IN MEMBERSHIP FOR 1986-87, AND THE AVERAGE TEACHER SALARY IN 1987-88

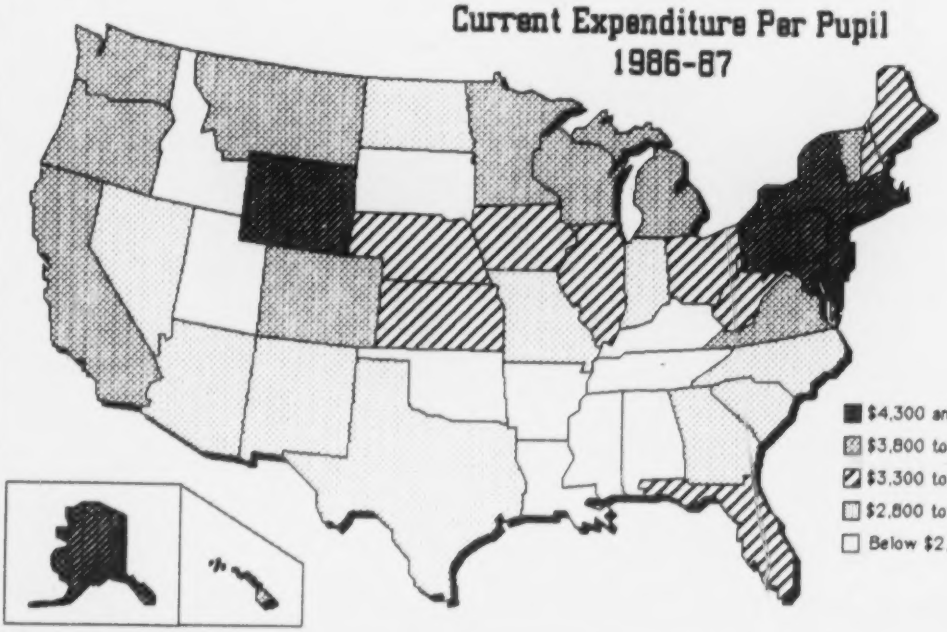
	State	Expenditures Per Pupil		Percent of U.S. Average	Average Salary 1987-88	Percent of U.S. Average	Rank
1	Alaska	$6,792		183%	$40,510	144%	1
2	New York	5,716	a	154%	34,300	122%	3
3	New Jersey	5,572	b	150%	30,788	110%	10
4	Connecticut	5,400	b	145%	33,776	120%	5
5	D.C.	5,200	b	140%	34,705	124%	2
6	Wyoming	5,018		135%	27,926	99%	20
7	Rhode Island	4,648		125%	32,858	117%	7
8	Delaware	4,493		121%	29,573	105%	13
9	Massachusetts	4,400	b	119%	30,800	110%	9
10	Maryland	4,301		116%	30,933	110%	8
11	Pennsylvania	4,278	b	115%	29,177	104%	15
12	Wisconsin	4,167	b	112%	29,206	104%	14
13	Vermont	4,123	b	111%	24,507	87%	35
14	Minnesota	4,018		108%	29,756	106%	11
15	Michigan	3,900	b	105%	34,050	121%	4
16	Oregon	3,883	b	105%	28,080	100%	18
17	Hawaii	3,850	b	104%	28,445	101%	17
18	Colorado	3,814		103%	28,651	102%	16
19	California	3,787		102%	33,200	118%	6
20	Montana	3,746	b	101%	23,774	85%	39
21	Washington	3,725	b	100%	27,960	100%	19
22	Virginia	3,708		100%	27,436	98%	23
23	Maine	3,666		99%	23,425	83%	40
24	Nebraska	3,654	b	98%	22,995	82%	43
25	Illinois	3,587	b	97%	29,716	106%	12
26	West Virginia	3,523	b	95%	21,736	77%	46
27	New Hampshire	3,514	b	95%	24,019	86%	38
28	Kansas	3,511		95%	24,647	88%	33
29	Iowa	3,509	b	95%	24,867	89%	30
30	Florida	3,500	b	94%	25,198	90%	28
31	Ohio	3,454		93%	27,606	98%	21
32	Nevada	3,361	b	91%	27,599	98%	22
33	Indiana	3,330	b	90%	27,067	96%	25
34	Texas	3,316		89%	25,387	90%	27
35	North Dakota	3,192	b	86%	21,660	77%	47
36	Georgia	3,067		83%	25,736	92%	26
37	New Mexico	3,038	b	82%	24,523	87%	34
38	Missouri	3,013		81%	24,704	88%	32
39	South Carolina	3,013	b	81%	24,241	86%	37
40	North Carolina	2,980	b	80%	25,073	89%	29
41	Arizona	2,971	b	80%	27,388	98%	24
42	South Dakota	2,892		78%	19,758	70%	51
43	Oklahoma	2,876		77%	23,100	82%	42
44	Louisiana	2,799		75%	21,209	76%	48
45	Tennessee	2,774	b	75%	24,748	88%	31
46	Arkansas	2,750	b	74%	20,340	72%	50
47	Idaho	2,500	b	67%	22,242	79%	45
48	Alabama	2,500	b	67%	23,201	83%	41
49	Kentucky	2,436	b	66%	24,274	86%	36
50	Mississippi	2,410		65%	20,750	74%	49
51	Utah	2,242		60%	22,783	81%	44
	U.S. Average	$3,713		100%	$28,085	100%	
	Guam	2,673		72%	27,713	99%	
	Puerto Rico	1,235		33%	11,700	42%	
	Virgin Islands	3,395		91%	18,682	67%	

a=preliminary or estimate; b=AFT estimate

AFT 1988 Teacher Salary Survey

Map 3

Current Expenditure Per Pupil 1986-87



Map 4

AFT Interstate Cost-Of-Living Index

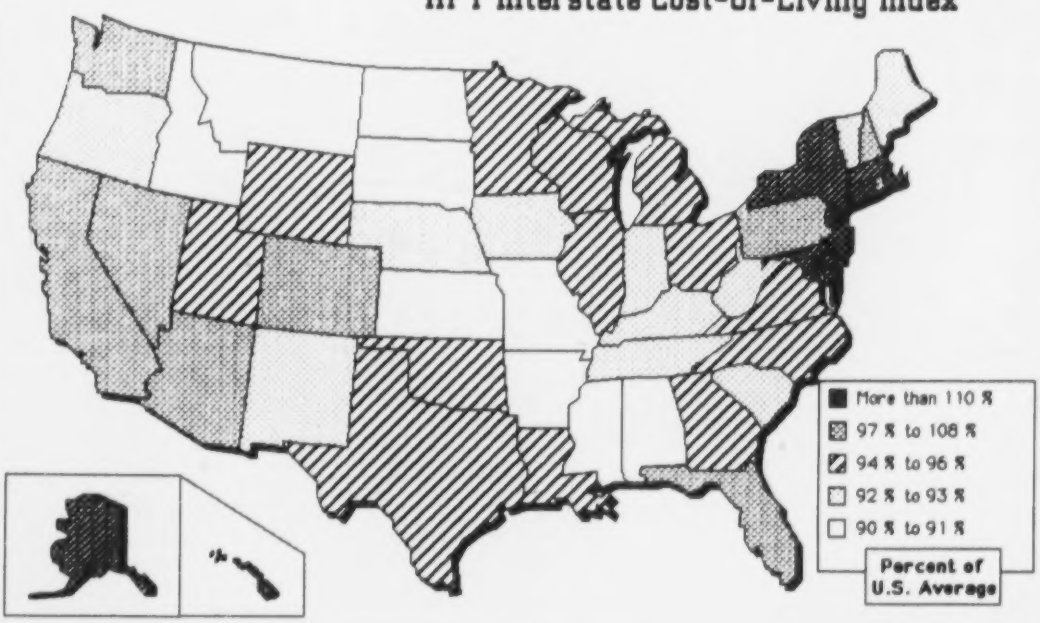


TABLE I-8

EXPENDITURES PER PUPIL IN 1986-87, AND THE AVERAGE TEACHER SALARY IN 1987-88
RANKED BY AVERAGE SALARY WITHIN REGION

State	Expenditures Per Pupil 1986-87	Average Salary 1987-88
NEW ENGLAND		
Connecticut	$5,400	$33,776
Rhode Island	4,648	32,858
Massachusetts	4,400	30,800
Vermont	4,123	24,507
New Hampshire	3,514	24,019
Maine	3,666	23,425
MIDEAST		
D.C.	5,200	34,705
New York	5,716	34,300
Maryland	4,301	30,933
New Jersey	5,572	30,788
Delaware	4,493	29,573
Pennsylvania	4,278	29,177
GREAT LAKES		
Michigan	3,900	34,050
Illinois	3,587	29,716
Wisconsin	4,167	29,206
Ohio	3,454	27,606
Indiana	3,330	27,067
PLAINS		
Minnesota	4,018	29,756
Iowa	3,509	24,867
Missouri	3,013	24,704
Kansas	3,511	24,647
Nebraska	3,654	22,995
North Dakota	3,192	21,660
South Dakota	2,892	19,758
SOUTHWEST		
Arizona	2,971	27,388
Texas	3,316	25,387
New Mexico	3,038	24,523
Oklahoma	2,876	23,100
SOUTHEAST		
Virginia	3,708	27,436
Georgia	3,067	25,736
Florida	3,500	25,198
North Carolina	2,980	25,073
Tennessee	2,774	24,748
Kentucky	2,436	24,274
South Carolina	3,013	24,241
Alabama	2,500	23,201
West Virginia	3,523	21,736
Louisiana	2,799	21,209
Mississippi	2,410	20,750
Arkansas	2,750	20,340
ROCKY MOUNTAINS		
Colorado	3,814	28,651
Wyoming	5,018	27,926
Montana	3,746	23,774
Utah	2,242	22,783
Idaho	2,500	22,242
FAR WEST		
California	3,787	33,200
Oregon	3,883	28,080
Washington	3,725	27,960
Nevada	3,361	27,599
Alaska	6,792	40,510
Hawaii	3,850	28,445
U.S. AVERAGE	$3,713	$28,085
TERRITORIES		
Guam	2,673	27,713
Puerto Rico	1,235	11,700
Virgin Islands	3,395	18,682

Map 5

1987-88 Average Teacher Salary, Ranked Within Region

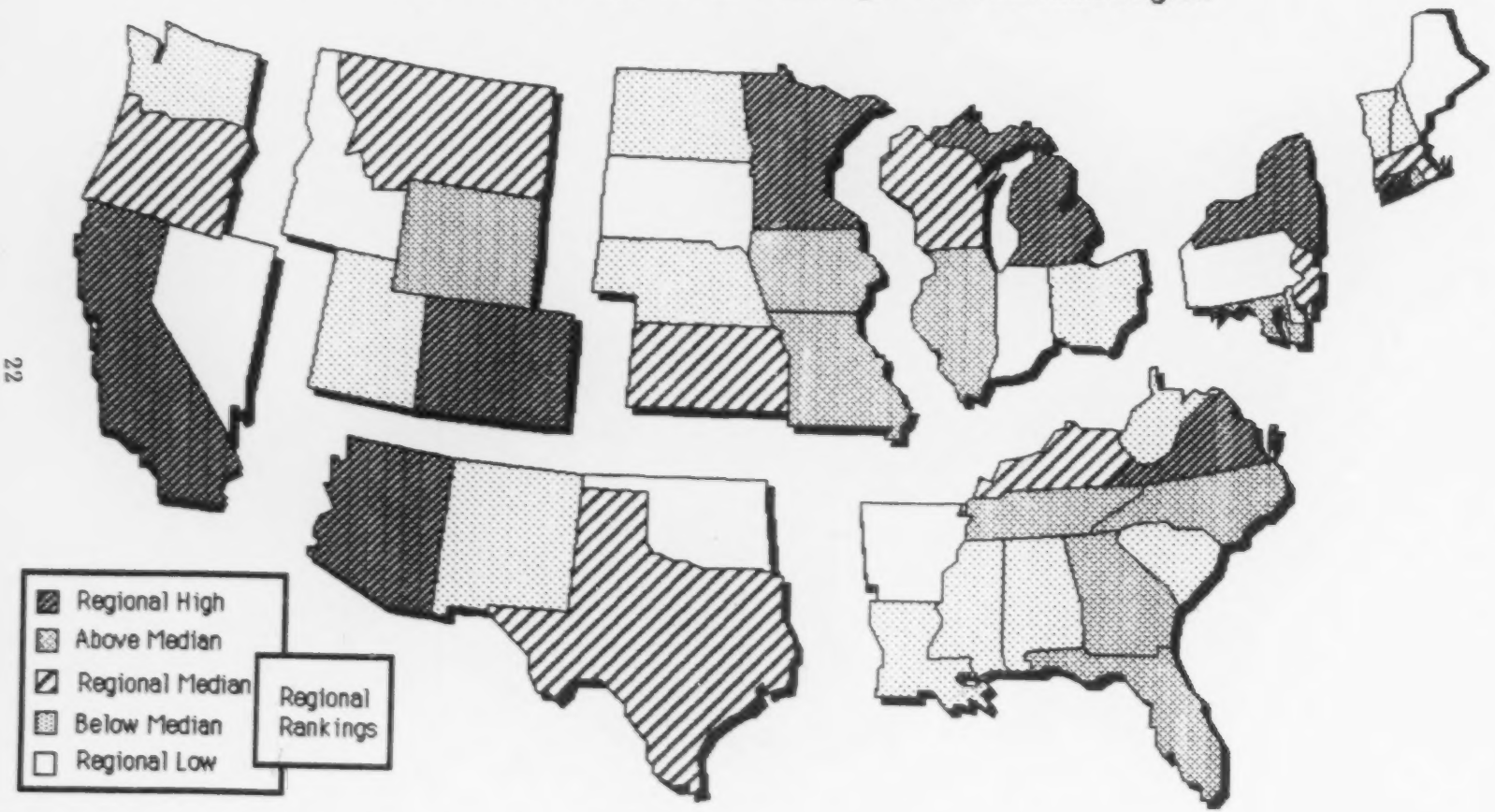


TABLE I-9

ESTIMATES OF TEACHER BENEFITS BY STATE IN 1983-84

State	FTE Employee Benefits	FTE Employee Earnings	Percent of Earnings	Rank	Average Teacher Salary	Rank	Average Teacher Benefits	Average Teacher Compensation	Rank
Alaska	$8,613 a	$34,920	24.7%	19	$35,500	1	8,756	44,256	1
New York	8,119	24,912	32.6%	5	27,319	3	8,903	36,222	2
Michigan	8,387	25,308	33.1%	4	27,125	4	8,989	36,114	3
Rhode Island	6,305	19,440	32.4%	6	25,337	5	8,218	33,555	4
Washington	6,977	21,576	32.3%	8	24,420	8	7,897	32,317	5
Maryland	6,351	20,196	31.4%	9	24,046	12	7,562	31,608	6
Oregon	7,145	19,800	36.1%	1	23,155	16	8,356	31,511	7
Hawaii	6,184	21,300	29.0%	11	24,357	9	7,072	31,429	8
D.C.	3,647	27,564	13.2%	49	27,659	2	3,660	31,319	9
Pennsylvania	6,980	20,040	34.8%	2	22,703	18	7,908	30,611	10
Connecticut	7,177	20,976	34.2%	3	22,627	19	7,742	30,369	11
California	5,629	25,896	21.7%	26	24,843	6	5,400	30,243	12
Wyoming	4,814	21,540	22.3%	24	24,500	7	5,476	29,976	13
Minnesota	4,681	21,588	21.7%	27	24,350	10	5,280	29,630	14
New Jersey	6,306	23,892	26.4%	12	23,264	14	6,140	29,404	15
Nevada	6,341	21,012	30.2%	10	22,355	20	6,746	29,101	16
Wisconsin	5,530	21,576	25.6%	16	22,811	17	5,847	28,658	17
Illinois	4,163	23,016	18.1%	40	24,211	11	4,379	28,590	18
Colorado	4,257	19,776	21.5%	28	23,276	13	5,010	28,286	19
Delaware	6,148	18,960	32.4%	7	20,934	26	6,788	27,722	20
Montana	5,506	21,048	26.2%	14	21,000	25	5,493	26,493	21
Massachusetts	2,593	20,076	12.9%	50	23,169	15	2,992	26,161	22
Indiana	3,402	18,720	18.2%	39	21,538	23	3,914	25,452	23
Arizona	3,533	21,612	16.3%	45	21,642	22	3,538	25,180	24
Utah	4,836	19,116	25.3%	18	20,007	29	5,061	25,068	25
New Mexico	3,271	17,772	18.4%	36	21,003	24	3,866	24,869	26
Virginia	4,149	17,760	23.4%	21	19,676	30	4,597	24,273	27
Florida	4,096	18,228	22.5%	23	19,497	32	4,381	23,878	28
Texas	3,016 a	17,304	17.4%	42	20,170	27	3,516	23,686	29
Kentucky	3,400 a	16,896	20.1%	33	19,660	31	3,956	23,616	30
Iowa	3,246	18,900	17.2%	44	20,149	28	3,461	23,610	31
Oklahoma	4,238	16,068	26.4%	13	18,580	39	4,901	23,481	32
Kansas	3,257	17,208	18.9%	35	19,411	33	3,674	23,085	33
Missouri	3,252 a	17,880	18.2%	38	19,274	34	3,506	22,780	34
Georgia	3,223	14,808	21.8%	25	18,631	37	4,055	22,686	35
Tennessee	3,387	14,424	23.5%	20	18,244	42	4,284	22,528	36
Idaho	3,796	16,284	23.3%	22	18,075	43	4,214	22,289	37
North Dakota	3,484	22,500	15.5%	47	19,261	35	2,982	22,243	38
North Carolina	3,274	15,828	20.7%	31	18,311	41	3,788	22,099	39
Nebraska	3,042	17,628	17.3%	43	18,785	36	3,242	22,027	40
Alabama	2,736	14,904	18.4%	37	18,600	38	3,414	22,014	41
Louisiana	3,221	16,548	19.5%	34	18,400	40	3,581	21,981	42
West Virginia	4,229	16,596	25.5%	17	17,489	45	4,457	21,946	43
Maine	3,716	14,388	25.8%	15	17,328	49	4,475	21,803	44
Vermont	3,209	15,612	20.6%	32	17,568	44	3,611	21,179	45
Arkansas	2,891	13,788	21.0%	29	17,424	46	3,653	21,077	46
South Carolina	2,583	14,736	17.5%	41	17,384	47	3,047	20,431	47
New Hampshire	2,514	15,684	16.0%	46	17,376	48	2,785	20,161	48
Mississippi	2,939 a	14,112	20.8%	30	15,812	51	3,293	19,105	49
South Dakota	2,218	14,952	14.8%	48	16,480	50	2,445	18,925	50
Ohio	na	20,076	0.0%	51	21,880	21	na	21,880	na
U.S. Average	$4,540	$20,148	22.5%		$21,974		4,951	$26,925	

a Benefit data from the U.S. Department of Education has been adjusted to reflect state contributions to the retirement system not reflected in the data.

II. Trends in Teacher Salaries Compared to Other Workers and Professions

Trends in Teacher Salaries Compared to Inflation. The purchasing power of teachers, measured in 1988 dollars according to the Consumer Price Index for All Urban Consumers, has risen approximately $5,500 since 1981. As shown in Table II-1 and Figure 2, purchasing power for teachers has been restored to the peak purchasing power period of 1971-73. In 1956, the average teacher salary was $17,636 (in 1988 dollars) -- about two-thirds of the current salary level. During the periods of rapid inflation in the mid-1970s and early 1980s, as shown in Figure 1, the average teacher salary increase fell below the inflation rate at the onset of inflation but increased as inflation waned. The real wage gains experienced by teachers in the early and mid 80s may be a product of this adjustment lag. The gap between the increase in the average teacher salary increase (5.5%) and the estimated inflation rate (4%) is the smallest since 1981.

In Table II-1 and the following tables, the 1988 inflation rate is estimated at 4.0 percent. Inflation may well turn out higher. Although the rate stands at 3.9 percent for the 12 months ending April 1988, a 4.6 percent annualized rate has been posted for the 3 months ending May 1988. Teachers may experience little, if any, gain in real earnings during 1988.

Trends in Teacher Salaries Compared to the Average Annual Earnings of All Workers. The ratio of teacher salaries to the mean average annual earnings of the full-time, nonagricultural worker was 1.16 in 1987 as shown in Table II-1. This ratio is at its highest level ever during the past 22 years. The ratio has been as low as 1.00 in 1957 and as high as 1.14 in 1971 but fell to 1.01 as recently as 1981. Figure 2 illustrates these trends.

The teacher to average worker salary ratio is an index, and the average worker's salary should not be interpreted as a target for teacher salaries. Some economic forces -- such as inflation and economic growth or stagnation -- affect all workers in the economy. Consequently, merely adjusting for inflation does not adequately describe the financial well-being of teachers. Had teacher purchasing power remained the same since 1956, teachers would be earning approximately $6,000 less than the average worker in 1988. Furthermore, as the productivity of the economy increases and the value of all labor rises, teachers should share equally in economy-wide gains in productivity, roughly measured by the real increase in the annual earnings of the average full-time worker.

Trends in Teacher Salaries Compared to the Average Annual Salaries of All Government Workers. Trends in government worker salaries have closely matched trends in teachers salaries. Teachers outpaced government workers over the 1960s, with the ratio of teacher salaries to government worker salaries rising to 1.11 in 1968. During the 1970s, however, government workers fared much better than teachers and the ratio fell to 1.00 by 1982. In 1987, teachers had a 10 percent advantage over all government workers.

Trends in Teacher Salaries Adjusted for Work Experience. Though it appears that teacher salaries are at the highest levels ever, the average teacher in 1988 had more experience -- 15.6 years -- than at any time over the past three decades, as shown in Figure 3. Clearly, the rapid rise in teacher salaries over the early 1980s was due primarily to layoffs of low-paid teachers and minimal hiring of beginning teachers. This effect has abated over the past 3 or 4 years as the growth in teacher experience has leveled off. The educational attainment of teachers has increased at a rate commensurate with their experience. In 1975, less than 40 percent of teachers held a masters degree. In 1985, the comparable figure was over 50 percent.

With an estimated 15.6 years of experience, the average teacher earned $28,085 in 1988. During 1972, the average teacher earned $27,410 (in 1988 dollars), but had only 10.7 years of experience. If a year of experience yields about 3.0 percent more on the salary schedule, a teacher with 15.6 years of experience in 1972 earned approximately $31,451 (in 1988 dollars) -- $2,500 more than teachers with 15.6 years of experience in 1988. Adjustments for other years are graphed in Figure 4. The 3.0 percent adjustment for a year of experience is conservative. In the school districts serving the nation's 100 largest cities in 1987, the average salary increase in moving from the BA beginning salary to the MA maximum salary (reached in an average of 15 years) was $1,008 or 3.2% of the average MA maximum salary of $30,990. Clearly, continued teacher dissatisfaction with their salaries seems legitimate from this perspective.

Trends in Teacher Salaries Compared to the Annual Earnings of Male and Female Workers. The work force has changed substantially over the past 30 years. Since 1961, both the average worker and average teacher have gained about one year of education, but the typical teacher still has four more years of education than the average worker. The influx of female workers in the labor force might make comparisons to the average worker problematic. The entry of many low-paid female workers could invalidate the use of the teacher/average worker salary ratio as an index by which to evaluate trends in teacher salaries. On the other hand, the comparison to female workers over time helps index the relative attractiveness of the female-dominated

teaching occupation. Table II-2 contains separate comparisons of the average teacher salary to full-time male and full-time female workers.

Male workers in the U.S. economy enjoyed an approximately 20 percent advantage over teachers during the 1960s, as shown in Table III-3 and graphed in Figure 5. The advantage grew to 34 percent over the 1970s as the salaries of teachers deteriorated, but fell to only a 14 percent advantage in 1987 -- the lowest ratio in any period during the past 30 years. The earnings of the average full-time, year-round female worker also gained slowly on teacher salaries until 1982, rising from 64 percent of the average teacher salary in 1968 to 80 percent by 1982. By 1988, however, full-time women workers earned just 73 percent as much as the average teacher.

Average Teacher Salaries Compared to Selected White-Collar Occupations. The relationship of salaries in other white-collar occupations to each other changed little over the past 25 years, as shown in Table II-3 and illustrated in Figure 6. For the fifth consecutive year, the average teacher salary grew faster or at the same rate as any of the salaries in five other white-collar occupations (4th panel of Table II-3). The job categories described in the tables and figure, such as Accountant "III" or Chemist "IV", contain the accountant or chemist who had earnings in the middle of the income distribution for all accountants or chemists. The figures in Table II-3 are the average of all people in that job category, such as Accountant III or Chemist IV. Lawyers earned about double the average teacher salary, chemists and engineers about 65 percent more and auditors and accountants about 20 to 25 percent more. Salaries in other white-collar occupations deteriorated relative to teacher salaries through the mid-1970s. Other white-collar occupations gained sharply on teachers from the mid-1970s until 1982, but in just the past five years, most of this gain has been erased. In 1962, teachers earned less relative to all of the occupations listed in the tables compared to 1987.

Teacher Salaries Compared to Academic Salaries. Academic salaries have not maintained the same consistent relationship with teacher salaries that private sector white-collar occupations have kept. The salary advantage of assistant professors over teachers has declined continuously since 1963, and in 1987, the advantage slipped to one percent (third panel of Table II-3). While full professors still have an 80 percent advantage, this figure has fallen continuously from a 120 percent advantage in 1967. During the 1960s, full professors enjoyed higher real earnings than did Attorney IIIs. For 1985, 1986 and 1987 academics experienced salary gains on par with teachers. In 1988, however, academic salaries improved at a slower rate than teacher salaries.

The Distribution of Earnings by Occupation. Some argue that teaching has difficulty in attracting talented youth and especially in retaining the best teachers because not even a few teachers have an opportunity to make a lot of money for excelling. They are forced to seek administrative positions or switch to other occupations. Master teacher and lead teacher programs are designed partly to keep our best teachers from changing occupations. The data in Figure 7 supports the contention of a narrow earnings distribution. Drawn from unpublished data tabulations of the Current Population Survey performed by the Bureau of Labor Statistics, only about 2 percent of teachers had weekly earnings in excess of $1,000 a week compared to 8 percent of accountants, 17 percent of professors, 20 percent of engineers and 35 percent of lawyers. Teachers are bunched tightly in the $300 to $600 a week range, while the other occupations tend to have a more spread out earnings distribution.

Projected Wage Increases For 1988-89. An analysis of 46 teacher salary adjustments in wage agreements covering 1,000 or more workers for 1988-89 indicated that teacher salaries will rise at least as much next year as in 1987-88. The average increase reported for 10 agreements reached during 1986-87 is 6.1 percent, while the average increase in 36 settlements reported between August 1987 and April 1988 is 5.5 percent. Figure 8 graphs these data against past projections using this data source and the national average salary based on data collected from state departments of education.

Salaries of Nonteaching Personnel. The average teacher salary increase of 145% since 1975-76 has been more than the increase in any category of nonteaching personnel shown in Table II-4, except central office secretaries. Superintendents (up 124 percent) and high school principals (up 120 percent) have lost ground to teachers. Though no data on age exist, the closing of the teacher-administrator salary gap probably reflects the rapid increase in teacher experience over the decade as illustrated in Figures 3 and 4. Beginning teacher salaries, for example, rose only 117 percent, the smallest increase of any category of personnel.

Wage gains for nonteaching school personnel, while not quite as high as those of teachers, have been better than those of private sector counterparts. Wage increases in the nonmanufacturing private sector have been 3.5 to 4.5 percent over the past four years, while instructional aides, custodians, cafeteria workers and bus drivers have had gains in the 4 to 6 percent range.

Figure 1

Annual Rate of Increase in Teacher Salaries Compared to the Consumer Price Index

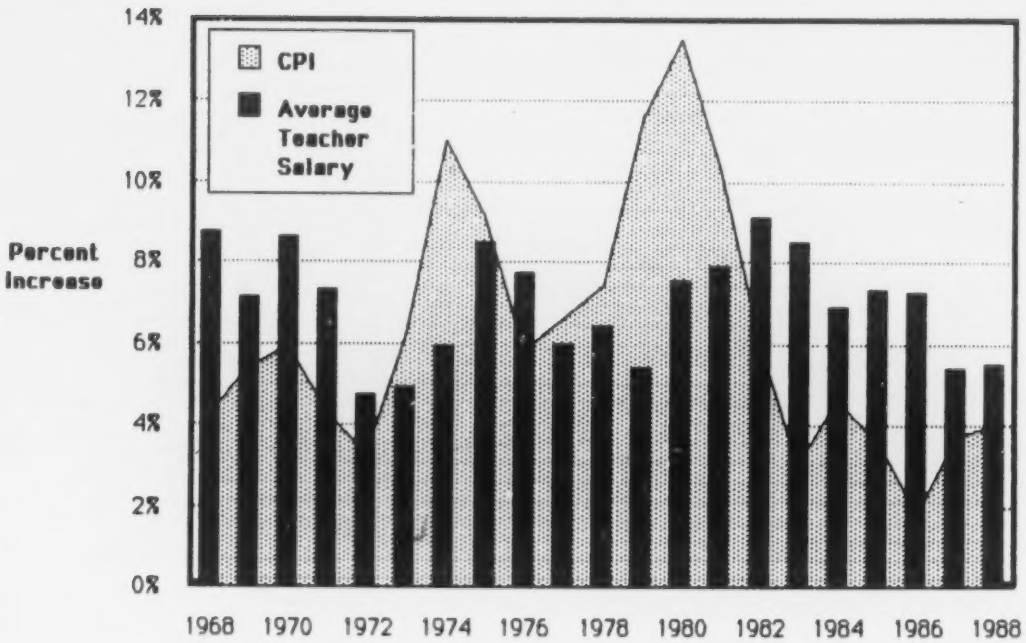


TABLE II-1

TRENDS IN TEACHER SALARIES COMPARED TO THE AVERAGE ANNUAL EARNINGS OF ALL WORKERS, AND OF ALL GOVERNMENT WORKERS

	Mean Teacher Salary	CPI	CPI Change	Mean Annual Earnings (1988 Dollars)			Ratio of Teacher Salary to Salary of:	
				Teachers	All Workers	Government Workers	All Workers	Gov't Workers
1988	$28,085	354.0 *	4.0% *	$28,085				
1987	26,615	340.4	3.7%	27,680	$23,611 *	$25,178 *	1.17	1.10
1986	25,260	328.4	1.9%	27,230	23,646	25,046	1.15	1.09
1985	23,572	322.2	3.6%	25,900	23,037	24,328	1.12	1.06
1984	21,974	311.1	4.6%	25,005	22,896	23,847	1.09	1.05
1983	20,547	297.4	3.0%	24,459	22,977	23,662	1.06	1.03
1982	18,945	288.6	6.0%	23,239	22,652	23,167	1.03	1.00
1981	17,364	272.3	10.2%	22,575	22,365	22,678	1.01	1.00
1980	16,100	247.0	13.5%	23,076	22,597	22,818	1.02	1.01
1979	14,970	217.7	11.5%	24,344	23,290	23,823	1.05	1.02
1978	14,207	195.3	7.4%	25,753	24,030	24,909	1.07	1.03
1977	13,352	181.8	6.6%	26,000	24,077	25,139	1.08	1.03
1976	12,591	170.5	5.8%	26,143	24,099	25,235	1.08	1.04
1975	11,690	161.2	9.1%	25,673	23,769	25,118	1.08	1.02
1974	10,778	147.7	11.0%	25,833	23,914	25,468	1.08	1.01
1973	10,176	133.1	6.2%	27,066	24,191	26,476	1.12	1.02
1972	9,705	125.3	3.3%	27,420	24,298	26,606	1.13	1.03
1971	9,269	121.3	4.3%	27,052	23,635	25,035	1.14	1.08
1970	8,635	116.3	5.9%	26,285	22,998	24,357	1.14	1.08
1969	7,952	109.8	5.4%	25,639	22,849	23,151	1.12	1.11
1968	7,423	104.2	4.2%	25,219	22,590	22,794	1.12	1.11
1967	6,830	100.0	2.9%	24,179	22,029	22,001	1.10	1.10
1966	6,485	97.2	2.9%	23,619	21,707	21,602	1.09	1.09
1965	6,195	94.5	1.7%	23,208	21,366	21,392	1.09	1.08
1964	5,995	92.9	1.3%	22,845	20,946	20,889	1.09	1.09
1963	5,732	91.7	1.2%	22,129	20,217	20,071	1.09	1.10
1962	5,515	90.6	1.1%	21,550	19,768	19,487	1.09	1.11
1961	5,275	89.6	1.0%	20,842	19,274	19,176	1.08	1.09
1960	4,995	88.7	1.6%	19,936	18,908	18,641	1.05	1.07
1959	4,797	87.3	0.8%	19,453	18,608	18,223	1.05	1.07
1958	4,571	86.6	2.7%	18,686	17,864	17,672	1.05	1.06
1957	4,239	84.3	3.6%	17,802	17,743	16,967	1.00	1.05
1956	4,055	81.4		17,636	17,615	16,633	1.00	1.06

* Estimated

Figure 2

Trends in Annual Earnings of Teachers, Government Workers, and All Workers

(Mean Annual Earnings in 1988 Dollars)

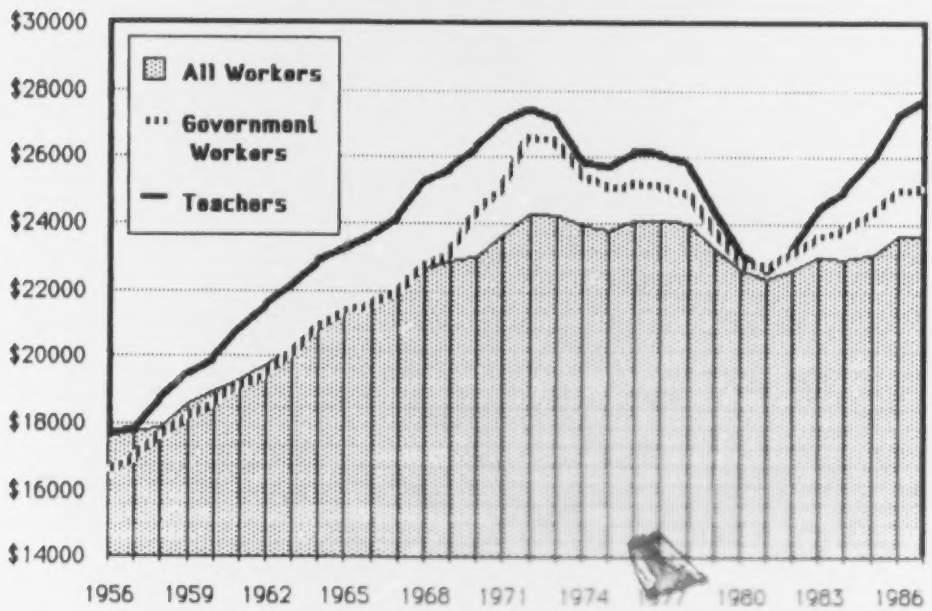


Figure 3

The Average Teacher Salary Compared to the Average Experience Level of Teachers

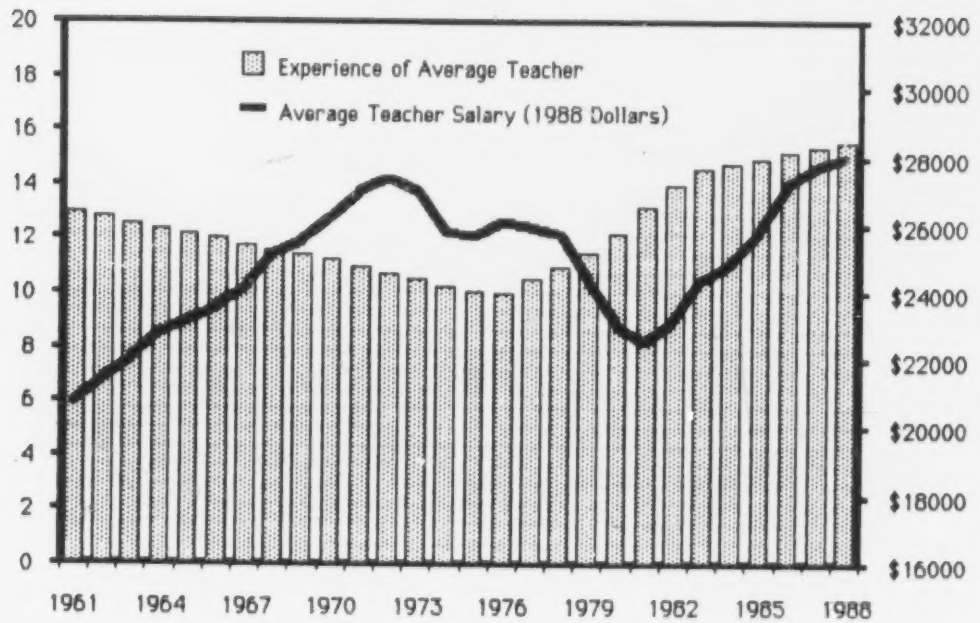


Figure 4

Trends in Annual Earnings of Teachers, Controlling For Work Experience

(Mean Annual Earnings in 1988 Dollars)

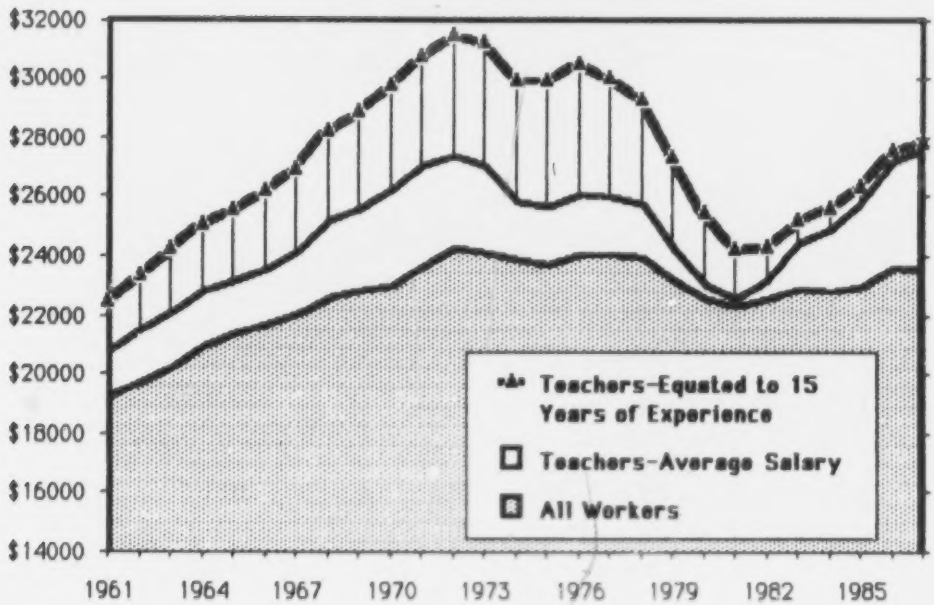


TABLE II-2

TRENDS IN TEACHER SALARIES COMPARED TO THE AVERAGE ANNUAL MONEY INCOME OF MALE AND FEMALE INDIVIDUALS

	Mean Teacher Salary	Mean Annual Money Income (1988 Dollars)			Proportion of Teacher Salary Earned by:		Annual Percent Increase in Nominal Dollars		
			Full-time Workers		Full-time Workers			Full-time Workers	
		Teachers	Men	Women	Men	Women	Teachers	Men	Women
1988	$28,085	$28,085					5.5%		
1987	26,615	27,680	31,680 *	20,228 *	1.14	0.73	5.4%	3.7%	4.3%
1986	25,260	27,230	31,672	20,094	1.16	0.74	7.2%	3.6%	3.6%
1985	23,572	25,900	31,166	19,762	1.20	0.76	7.3%	4.1%	5.4%
1984	21,974	25,005	30,995	19,423	1.24	0.78	6.9%	5.5%	6.3%
1983	20,547	24,459	30,720	19,113	1.26	0.78	8.5%	4.0%	6.0%
1982	18,945	23,239	30,432	18,574	1.31	0.80	9.1%	6.8%	9.2%
1981	17,364	22,575	30,187	18,032	1.34	0.80	7.9%	8.3%	8.9%
1980	16,100	23,076	30,723	18,247	1.33	0.79	7.5%	7.4%	11.2%
1979	14,970	24,344	32,447	18,616	1.33	0.76	5.4%	9.0%	10.0%
1978	14,207	25,753	33,181	18,857	1.29	0.73	6.4%	8.1%	9.1%
1977	13,352	26,000	32,966	18,567	1.27	0.71	6.0%	7.8%	6.5%
1976	12,591	26,143	32,601	18,596	1.25	0.71	7.7%	6.7%	8.4%
1975	11,690	25,673	32,314	18,144	1.26	0.71	8.5%	7.0%	7.5%
1974	10,778	25,833	32,974	18,417	1.28	0.71	5.9%	9.0%	11.2%
1973	10,176	27,066	33,561	18,382	1.24	0.68	4.9%	7.0%	5.9%
1972	9,705	27,420	33,331	18,438	1.22	0.67	4.7%	8.9%	6.8%
1971	9,269	27,052	31,619	17,829	1.17	0.66	7.3%	5.1%	4.3%
1970	8,635	26,285	31,390	17,826	1.19	0.68	8.6%	5.9%	8.3%
1969	7,952	25,639	31,394	17,427	1.22	0.68	7.1%	10.9%	13.5%
1968	7,423	25,219	29,840	16,186	1.18	0.64	8.7%	9.5%	7.9%
1967	6,830	24,179	28,403	15,626	1.17	0.65	5.3%	1.0%	3.3%
1966	6,485	23,619	28,940	15,563	1.23	0.66	4.7%	5.8%	5.2%
1965	6,195	23,208	28,141	15,210	1.21	0.66	3.3%	6.5%	2.9%
1964	5,995	22,845	26,888	15,041	1.18	0.66	4.6%	3.6%	4.4%
1963	5,732	22,129	26,294	14,597	1.19	0.66	3.9%	3.6%	4.9%
1962	5,515	21,550	25,699	14,079	1.19	0.65	4.5%	1.4%	1.7%
1961	5,275	20,842	25,627	14,003	1.23	0.67	5.6%	5.7%	4.3%
1960	4,995	19,936	24,490	13,558	1.23	0.68	4.1%	5.4%	2.1%
1959	4,797	19,453	23,617	13,487	1.21	0.69	4.9%	5.8%	4.2%
1958	4,571	18,686	22,508	13,049	1.20	0.70	7.8%	5.0%	5.5%
1957	4,239	17,802	22,026	12,708	1.24	0.71	4.5%	4.2%	4.3%

Figure 5

Ratio of Annual Money Income of Male and Female Full-Time Workers to the Average Teacher Salary

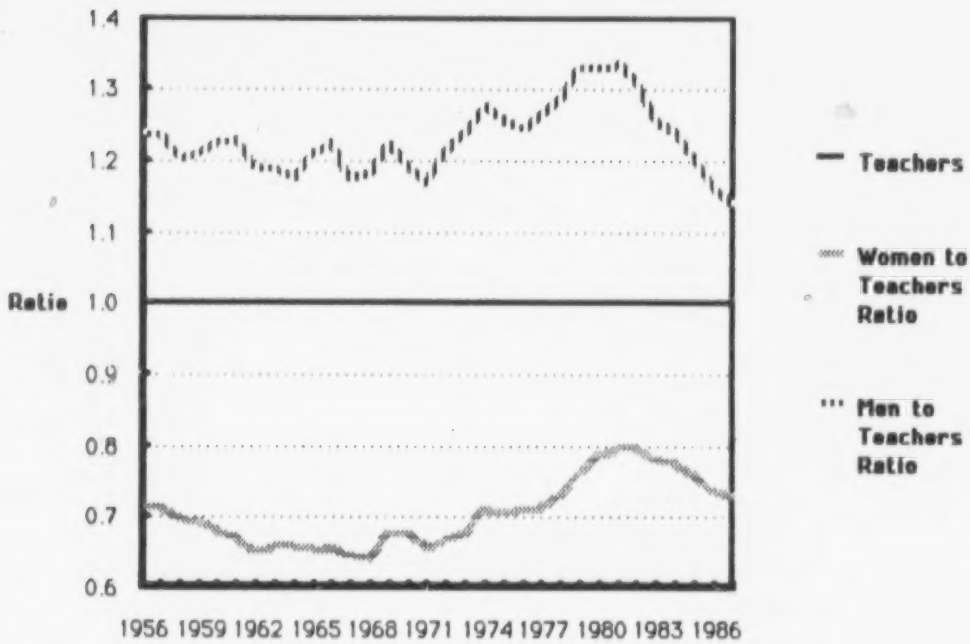


TABLE II-3

TRENDS IN TEACHER SALARIES COMPARED TO THE AVERAGE ANNUAL SALARIES OF SELECTED WHITE COLLAR OCCUPATIONS

	Mean Teacher Salary	Account-ant III	Auditor III	Attorney III	Chemist IV	Engineer IV	Full Prof. Public Doctoral	Assistant Prof. Public Comprehensive
1988	$28,085						$51,080	$28,380
1987	26,615	$32,074	$33,302	$52,158	$43,480	$44,360	48,740	27,320
1986	25,260	31,143	32,121	50,119	41,548	42,667	45,600	26,000
1985	23,572	30,037	31,246	47,742	39,418	40,991	42,600	24,400
1984	21,974	28,721	30,209	44,743	37,643	39,005	39,800	23,000
1983	20,547	27,346	28,245	42,271	35,439	36,726	38,200	22,000
1982	18,945	25,673	26,502	39,649	34,047	34,443	35,700	20,800
1981	17,364	23,545	24,401	36,373	30,801	31,352	32,900	19,300
1980	16,100	21,299	22,026	33,034	27,681	28,486	30,100	17,800
1979	14,970	19,468	20,303	29,644	25,459	25,989	28,200	16,600
1978	14,207	18,115	18,756	27,738	23,532	23,972	26,400	15,900
1977	13,352	16,545	17,108	25,460	21,674	22,072	25,200	15,700
1976	12,591	15,428	16,059	24,205	20,429	20,749	24,200	14,600
1975	11,690	14,458	15,334	22,558	19,204	19,443	22,700	13,900
1974	10,778	13,285	14,341	21,082	17,283	17,929	21,600	13,100
1973	10,176	12,472	13,568	19,565	16,140	17,030	20,500	12,500
1972	9,705	11,879	12,881	18,392	15,670	16,159	19,800	11,800
1971	9,269	11,383	12,227	17,509	15,036	15,535	19,200	11,400
1970	8,635	10,686	11,475	16,884	14,218	14,695	18,100	10,800
1969	7,952	10,029	10,726	15,879	13,359	13,893	17,100	10,100
1968	7,423	9,367	9,977	15,283	12,751	13,095	16,100	9,500
1967	6,830	8,879	9,449	14,419	12,044	12,424	15,000	8,600
1966	6,485	8,328	8,904	14,052	11,448	11,784	14,100	8,300
1965	6,195	8,124	8,748	13,644	10,980	11,376	13,200	7,900
1964	5,995	7,908	8,520	12,816	10,632	11,016	12,500	7,700
1963	5,732	7,668	8,244	12,300	10,248	10,728	11,800	7,500
1962	5,515	7,416	7,932	11,844	9,936	10,248	na	na

(1988 Dollars)

	Mean Teacher Salary	Account-ant III	Auditor III	Attorney III	Chemist IV	Engineer IV	Full Prof. Public Doctoral	Assistant Prof. Public Comprehensive
1988	$28,085						$51,080	$28,380
1987	27,680	$33,357	$34,634	$54,244	$45,219	$46,134	50,690	28,621
1986	27,230	33,572	34,627	54,028	44,789	45,995	49,157	28,028
1985	25,900	33,003	34,331	52,456	43,310	45,039	46,807	26,809
1984	25,005	32,683	34,376	50,915	42,836	44,386	45,290	26,173
1983	24,459	32,552	33,622	50,318	42,186	43,718	45,472	26,188
1982	23,239	31,492	32,509	48,636	41,764	42,250	43,792	25,515
1981	22,575	30,611	31,724	47,288	40,044	40,761	42,773	25,092
1980	23,076	30,527	31,569	47,346	39,674	40,828	43,141	25,512
1979	24,344	31,658	33,016	48,206	41,401	42,262	45,858	26,994
1978	25,753	32,837	33,999	50,280	42,656	43,454	47,855	28,822
1977	26,000	32,218	33,314	49,578	42,205	42,980	49,072	30,572
1976	26,143	32,034	33,344	50,258	42,418	43,082	50,247	30,315
1975	25,673	31,752	33,675	49,540	42,174	42,699	49,852	30,526
1974	25,833	31,842	34,373	50,531	41,425	42,973	51,772	31,399
1973	27,066	33,173	36,088	52,038	42,929	45,296	54,525	33,247
1972	27,420	33,562	36,393	51,964	44,273	45,655	55,942	33,339
1971	27,052	33,221	35,685	51,100	43,883	45,339	56,036	33,271
1970	26,285	32,528	34,930	51,395	43,279	44,731	55,096	32,875
1969	25,639	32,335	34,583	51,197	43,072	44,794	55,134	32,564
1968	25,219	31,824	33,897	51,923	43,321	44,490	54,699	32,276
1967	24,179	31,433	33,451	51,046	42,638	43,983	53,102	30,445
1966	23,619	30,332	32,430	51,179	41,695	42,919	51,354	30,230
1965	23,208	30,434	32,772	51,113	41,133	42,617	49,450	29,595
1964	22,845	30,135	32,467	48,838	40,516	41,979	47,634	29,343
1963	22,129	29,603	31,827	47,485	39,563	41,416	45,555	28,954
1962	21,550	28,978	30,994	46,280	38,825	40,044	na	na

AFT 1988 Teacher Salary Survey

(TABLE II-3 Continued)

RATIO OF SALARIES IN OTHER OCCUPATIONS TO TEACHER SALARIES

	Teachers	Account-ant III	Auditor III	Attorney III	Chemist IV	Engineer IV	Full Prof. Public Doctoral	Assistant Prof. Public Comprehensive
1988	1.00						1.82	1.01
1987	1.00	1.21	1.25	1.96	1.63	1.67	1.83	1.03
1986	1.00	1.23	1.27	1.98	1.64	1.69	1.81	1.03
1985	1.00	1.27	1.33	2.03	1.67	1.74	1.81	1.04
1984	1.00	1.31	1.37	2.04	1.71	1.78	1.81	1.05
1983	1.00	1.33	1.37	2.06	1.72	1.79	1.86	1.07
1982	1.00	1.36	1.40	2.09	1.80	1.82	1.88	1.10
1981	1.00	1.36	1.41	2.09	1.77	1.81	1.89	1.11
1980	1.00	1.32	1.37	2.05	1.72	1.77	1.87	1.11
1979	1.00	1.30	1.36	1.98	1.70	1.74	1.88	1.11
1978	1.00	1.28	1.32	1.95	1.66	1.69	1.86	1.12
1977	1.00	1.24	1.28	1.91	1.62	1.65	1.89	1.18
1976	1.00	1.23	1.28	1.92	1.62	1.65	1.92	1.16
1975	1.00	1.24	1.31	1.93	1.64	1.66	1.94	1.19
1974	1.00	1.23	1.33	1.96	1.60	1.66	2.00	1.22
1973	1.00	1.23	1.33	1.92	1.59	1.67	2.01	1.23
1972	1.00	1.22	1.33	1.90	1.61	1.67	2.04	1.22
1971	1.00	1.23	1.32	1.89	1.62	1.68	2.07	1.23
1970	1.00	1.24	1.33	1.96	1.65	1.70	2.10	1.25
1969	1.00	1.26	1.35	2.00	1.68	1.75	2.15	1.27
1968	1.00	1.26	1.34	2.06	1.72	1.76	2.17	1.28
1967	1.00	1.30	1.38	2.11	1.76	1.82	2.20	1.26
1966	1.00	1.28	1.37	2.17	1.77	1.82	2.17	1.28
1965	1.00	1.31	1.41	2.20	1.77	1.84	2.13	1.28
1964	1.00	1.32	1.42	2.14	1.77	1.84	2.09	1.28
1963	1.00	1.34	1.44	2.15	1.79	1.87	2.06	1.31
1962	1.00	1.34	1.44	2.15	1.80	1.86	na	na

ANNUAL PERCENT INCREASE

	Mean Teacher Salary	Account-ant III	Auditor III	Attorney III	Chemist IV	Engineer IV	Full Prof. Public Doctoral	Assistant Prof. Public Comprehensive
1988	5.5%						4.8%	3.1%
1987	5.4%	3.0%	3.7%	4.1%	4.7%	4.0%	6.9%	5.8%
1986	7.2%	3.7%	2.8%	5.0%	5.4%	4.1%	7.0%	6.6%
1985	7.3%	4.6%	3.4%	6.7%	4.7%	5.1%	7.0%	6.1%
1984	6.9%	5.0%	7.0%	5.8%	6.2%	6.2%	4.2%	4.5%
1983	8.5%	6.5%	6.6%	6.6%	4.1%	6.6%	7.0%	5.8%
1982	9.1%	9.0%	8.6%	9.0%	10.5%	9.9%	8.5%	7.8%
1981	7.9%	10.5%	10.8%	10.1%	11.3%	10.1%	9.3%	8.4%
1980	7.5%	9.4%	8.5%	11.4%	8.7%	9.6%	6.7%	7.2%
1979	5.4%	7.5%	8.2%	6.9%	8.2%	8.4%	6.8%	4.4%
1978	6.4%	9.5%	9.6%	8.9%	8.6%	8.6%	4.8%	1.3%
1977	6.0%	7.2%	6.5%	5.2%	6.1%	6.4%	4.1%	7.5%
1976	7.7%	6.7%	4.7%	7.3%	6.4%	6.7%	6.6%	5.0%
1975	8.5%	8.8%	6.9%	7.0%	11.1%	8.4%	5.1%	6.1%
1974	5.9%	6.5%	5.7%	7.8%	7.1%	5.3%	5.4%	4.8%
1973	4.9%	5.0%	5.3%	6.4%	3.0%	5.4%	3.5%	5.9%
1972	4.7%	4.4%	5.3%	5.0%	4.2%	4.0%	3.1%	3.5%
1971	7.3%	6.5%	6.6%	3.7%	5.8%	5.7%	6.1%	5.6%
1970	8.6%	6.6%	7.0%	6.3%	6.4%	5.8%	5.8%	6.9%
1969	7.1%	7.1%	7.5%	3.9%	4.8%	6.1%	6.2%	6.3%
1968	8.7%	5.5%	5.6%	6.0%	5.9%	5.4%	7.3%	10.5%
1967	5.3%	6.6%	6.1%	2.6%	5.2%	5.4%	6.4%	3.6%
1966	4.7%	2.5%	1.8%	3.0%	4.3%	3.6%	6.8%	5.1%
1965	3.3%	2.7%	2.7%	6.5%	3.3%	3.3%	5.6%	2.6%
1964	4.6%	3.1%	3.3%	4.2%	3.7%	2.7%	5.9%	2.7%
1963	3.9%	3.4%	3.9%	3.9%	3.1%	4.7%	na	na
1962	4.5%	3.0%	2.6%	2.1%	0.8%	4.5%	na	na

Figure 6

Trends in the Average Salary in Teaching and in Selected White-Collar Occupations (1988 Dollars)

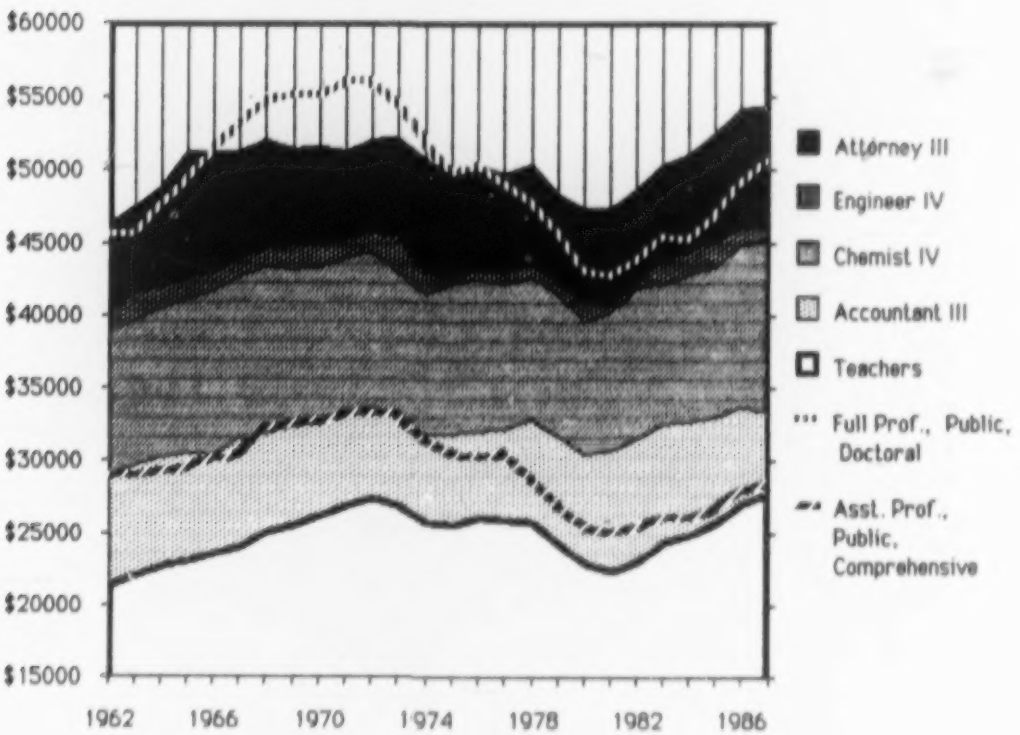


Figure 7

Distribution of Weekly Earnings In 1987 For Teachers And Selected Occupational Categories

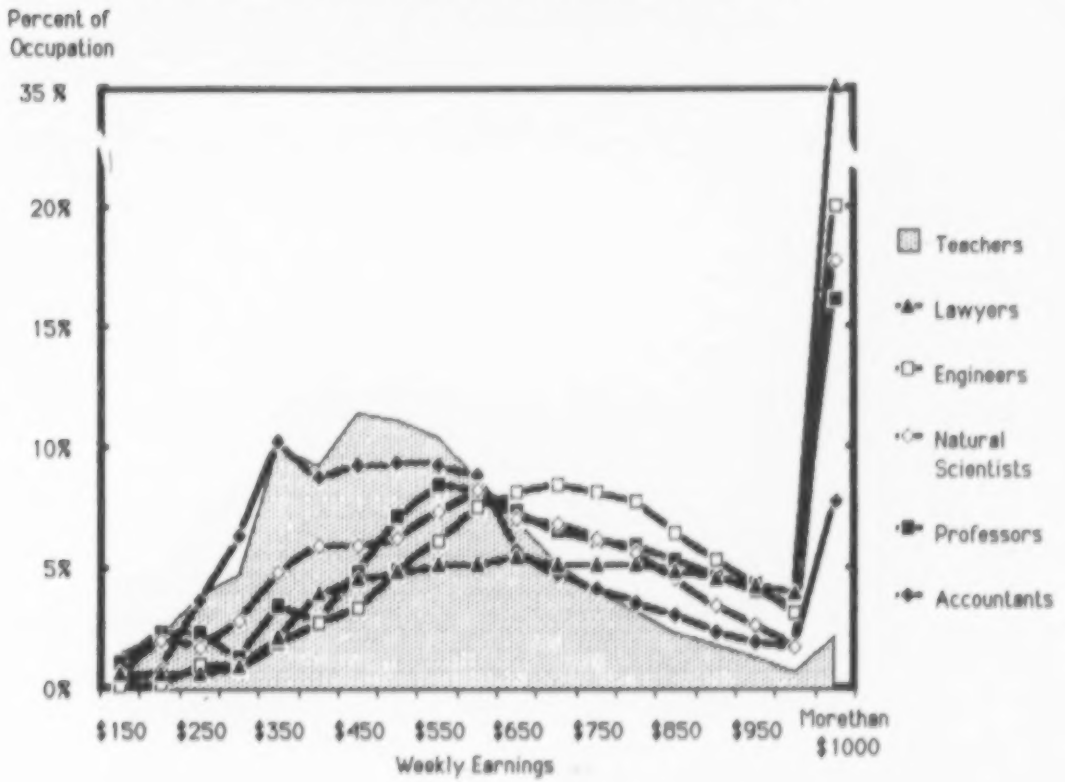
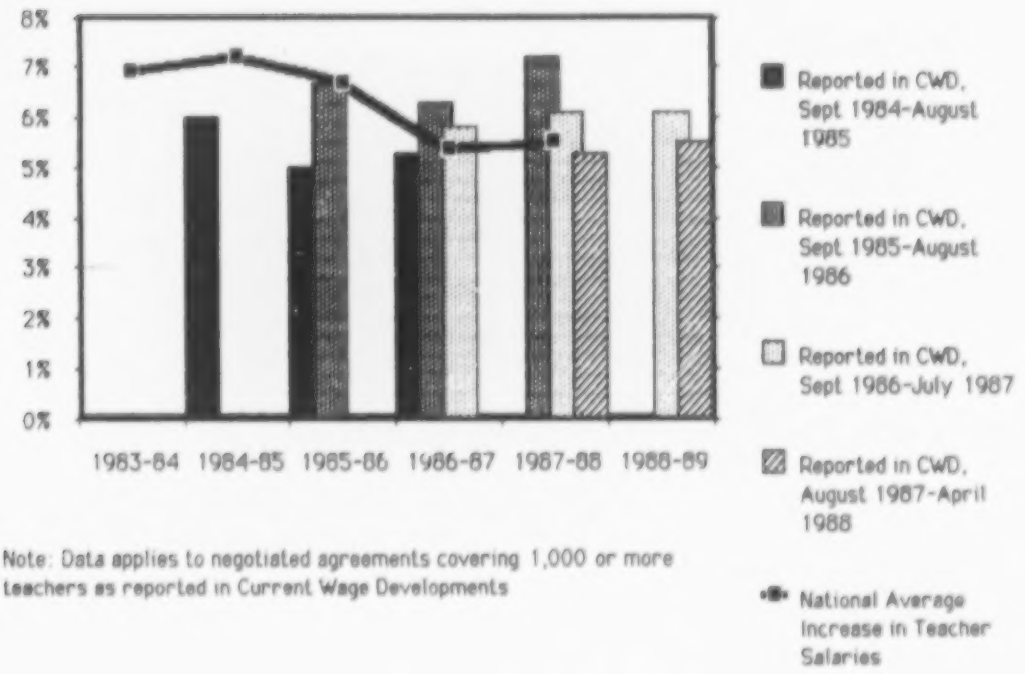


Figure 8

Average Annual Salary Adjustments for Teachers --Projections for 1988-89



Note: Data applies to negotiated agreements covering 1,000 or more teachers as reported in Current Wage Developments

Table II-4

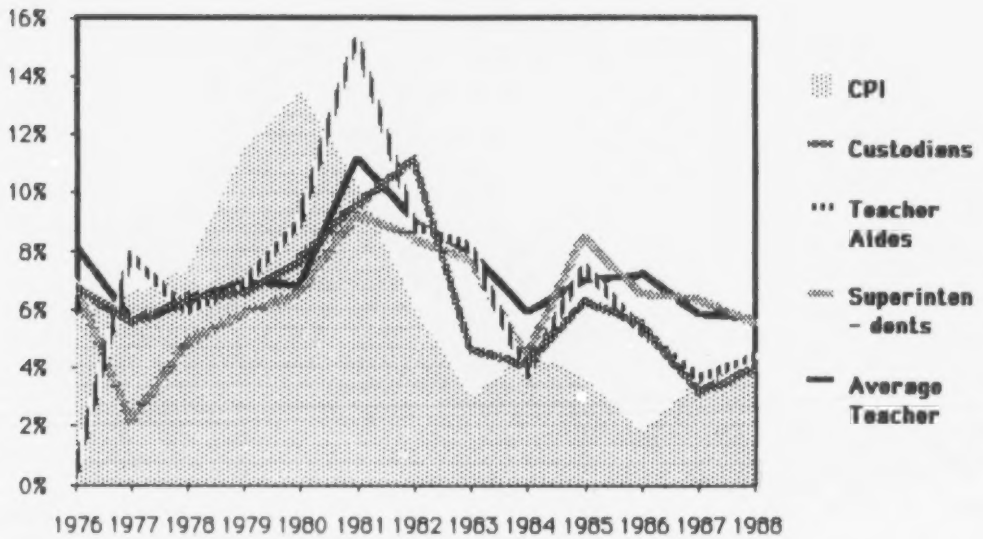
SALARIES OR EARNINGS OF NONTEACHING SCHOOL PERSONNEL, 1975-1976 TO 1987-88

	1975-76	1977-78	1979-80	1981-82	1983-84	1985-86	1986-87	1987-88	1975-1988
Teachers-Average	$12,437	$13,941	$15,913	$19,275	$22,039	$25,276	$26,731	$28,230	
Teachers-Beginning	8,058	9,515	10,657	12,595	14,278	16,692	17,667	18,657	
Superintendents	32,527	34,875	39,344	46,664	52,483	60,707	64,580	68,147	
H.S. Principals	23,306	25,642	29,207	34,776	39,334	43,793	47,896	50,512	
Secretaries									
Central Office	7,929	9,023	10,331	12,718	14,366	16,383	17,182	18,220	
School Building	6,521	7,328	8,348	10,301	11,613	13,233	13,947	14,749	
Hourly Workers									
Instructional Aide	$2.92	$3.34	$3.89	$4.88	$5.48	$6.20	$6.43	$6.72	
Custodians	3.78	4.25	4.88	5.95	6.49	7.28	7.51	7.82	
Cafeteria Workers	2.83	3.24	3.78	4.57	5.09	5.76	5.92	6.23	
Bus Drivers	4.04	4.59	5.21	6.26	6.89	7.72	8.06	8.31	
ANNUAL PERCENT INCREASE									
Teachers-Average	8.1%	6.3%	6.8%	9.0%	5.9%	7.2%	5.8%	5.6%	145.3%
Teachers-Beginning	-6.4%	4.7%	5.9%	7.9%	5.5%	7.8%	5.8%	5.6%	116.7%
Superintendents	7.0%	4.9%	6.6%	8.5%	4.4%	6.6%	6.4%	5.5%	124.3%
H.S. Principals	1.8%	5.7%	6.5%	7.9%	4.6%	4.0%	9.4%	5.5%	120.6%
Secretaries									
Central Office	8.3%	6.8%	8.1%	9.9%	5.3%	6.8%	4.9%	6.0%	149.0%
School Building	7.9%	7.0%	7.4%	10.1%	5.5%	5.8%	5.4%	5.8%	143.9%
Hourly Workers									
Instructional Aide	0.3%	6.0%	9.0%	8.9%	3.8%	5.3%	3.7%	4.5%	130.9%
Custodians	6.8%	6.5%	7.7%	11.2%	4.2%	5.5%	3.2%	4.1%	120.9%
Cafeteria Workers	8.4%	8.0%	8.6%	9.6%	4.5%	6.3%	2.8%	5.2%	138.7%
Bus Drivers	7.7%	7.2%	5.7%	8.9%	5.0%	6.2%	4.4%	3.1%	121.6%
1988 DOLLARS									
Teachers-Average	$25,823	$25,271	$22,808	$23,644	$25,079	$27,248	$27,800	$28,230	
Teachers-Beginning	18,184	17,816	16,663	15,745	16,342	17,635	18,313	18,657	
Superintendents	67,537	63,217	56,390	57,241	59,723	65,442	67,163	68,147	
H.S. Principals	48,391	46,481	41,861	42,659	44,760	47,209	49,812	50,512	
Secretaries									
Central Office	16,463	16,356	14,807	15,601	16,348	17,661	17,869	18,220	
School Building	13,540	13,283	11,965	12,636	13,215	14,265	14,505	14,749	
Hourly Workers									
Instructional Aide	$6.06	$6.05	$5.58	$5.99	$6.24	$6.68	$6.69	$6.72	
Custodians	7.85	7.70	6.99	7.30	7.39	7.85	7.81	7.82	
Cafeteria Workers	5.88	5.87	5.42	5.61	5.79	6.21	6.16	6.23	
Bus Drivers	8.39	8.32	7.47	7.68	7.84	8.32	8.38	8.31	

Data Source: Educational Research Service
AFT 1988 Teacher Salary Survey

Figure 9

Annual Rate of Increase in Teacher Salaries and Earnings for Selected Nonteaching Positions



III. Beginning Teacher Salaries, the Hiring of Beginning and Reentering Teachers and Teacher Retirement

Great attention has been focused on beginning teacher salaries during the 1980s. The average beginning teacher salary reported in this survey is $18,557 for 1987-88, up 5.4 percent from the previous year. The Educational Research Service, in its annual survey of school districts across the nation, reports a $18,657 figure for the average of the "lowest paid teacher," up 5.6 percent from the previous year. A wage survey by the Department of Defense of the 170 school districts serving cities with populations of more than 100,000 yielded an average beginning teacher salary of $18,345, up 6.0 percent from the previous year.

Minimum Salary by State. Alaska, California, Connecticut, Michigan, New York and New Jersey have actual starting salaries in excess of $20,000 while only Idaho, Louisiana and Vermont report average starting salaries below $15,000. As shown in Table III-1, beginning teachers in Iowa, New Hampshire, Maine and Maryland experienced a double-digit salary jump over beginning teachers in 1986-87. The actual average minimum salary stands at 66.7 percent of the U.S. average the same as in 1986-87. This ratio varied from a low of 55.1 percent in the District of Columbia to 80 percent in Arkansas. Southern states typically have higher starting salaries relative to the average salary.

Trends in Beginning Teacher Salaries Relative to Expected Salaries of College Graduates in the Private Sector. While beginning offers in business for new college graduates in other white-collar occupations remain high compared to beginning teachers (ranging from 55 percent more for engineers to 8 percent more for sales and marketing graduates in 1987), the earnings advantage of these white-collar occupations is at about the lowest level since about 1978. During 1987, only accountants and chemists were expected to have higher beginning salary growth than teachers. If beginning teacher salaries grow at an estimated rate of 5.5%, three occupations will make gains on teachers: accountants (up 8 percent), sales and marketing majors (up 12.9 percent) and liberal arts graduates (up 10.2 percent). Table III-3 contains these data, and Figure 10 graphs the relationship between starting salaries.

Starting salaries in other white-collar occupations show less stability among each other over time than do the average salaries. Private employers tend to make labor market adjustments through the hiring of, and salaries given to, beginning employees. As in the average salary comparison, beginning salaries in other occupations gained on teacher salaries from the mid-1970s until about 1982 (except for

accounting, which has shown a slow but continuous decline relative to beginning teacher salaries through 1985). While beginning teachers are just $50 short of their highest-ever salary (in 1988 dollars) all of the other occupations except computer science and math/statistics have yet to regain previous purchasing power experienced in the previous decade.

Regional Comparison of Beginning Teacher Salaries to Recent College Graduates. Several regional patterns emerge when comparing beginning teacher salaries to recent college graduates, as shown in Table III-3. Entry level teacher salaries are below salaries for all occupations in all regions, except for management trainees in the Western region. Starting teacher salaries are closer to those in any other occupations in the Western region than in any other region. One of the reasons is that California, which dominates the Western region, requires teachers to have a BA outside of teaching and an MA in Education. Consequently, the Western region has the highest beginning salary.

Starting salaries in accounting are about the same relative to beginning teachers salaries in all of the regions except the West. Management trainees earn the most, compared to teachers, in the South where they earn about 14 percent more than new teachers. Computer scientists have about the same relative pay advantage in each region except the West. Retail/wholesale occupations do the best compared to teachers in the Eastern region. Engineering BAs have the smallest advantage over teachers in the West and the Mid-Atlantic region -- earning only 40 to 45 percent more than beginning teachers in those regions.

New Hires Entering Teaching for the First Time. For 33 states reporting data for 1986-87, beginning teachers comprised as much as 3.4 percent of classroom teachers, as shown in Table III-4. The District of Columbia, Hawaii, Florida, Oklahoma and Texas reported that more than 5 percent of their teachers were beginning teachers in 1986-87. For 28 states reporting data for 1987-88, beginning teachers comprised only 3.1 percent of classroom teachers. Arkansas, Florida, Idaho and South Dakota reported increases exceeding 5 percent. Among states reporting data for both years, 10 states indicated that they hired fewer new teachers, 4 reported no change and 13 reported hiring more new teachers. The leveling off in new teacher hiring is consistent with projections made by the National Center for Educational Statistics that the demand for additional teachers would speed up in the early 1980s, level off in the mid-1980s, and speed up again in the late 1980s. Conclusions based on this data, however, should be strictly speculative, given the many states that do not collect these data, the inconsistencies in definitions among states, and the utilization of an unweighted average.

Reentering Teachers. The definition of "reentering teacher" varies from state to state, but the figure generally represents those teachers who have been out of teaching for at least one year. Reentering teachers could include reappointments after layoffs, maternity reinstatements and illness reinstatements. The data generally include out-of-state experienced teachers and teachers from private school backgrounds, even if there is no break in service. Specific exceptions to these generalizations noted by State Departments of Education are footnoted in Table III-5. A recent study in Connecticut (Connecticut State Department of Education, Teacher Supply and Demand, 1985) shows that during 1983-84 only 29 percent of leaving teachers retired. Other reasons for leaving included maternity/childbearing (15.0 percent), entering another profession (11.4 percent), spouse left the state (7.8 percent) and reduction in force (5.0 percent). Connecticut also reports that returning experienced teachers are more likely to be female (85 percent), be less than 40 years old (70 percent) and have less than 5 years of experience (58 percent).

Based on data from 20 states in 1986-87 and 17 states in 1987-88 listed in Table III-5, the number of experienced teachers reentering the classroom about matched the number of beginning teachers in 1987 and exceeds the number of beginning teachers in 1987-88. Returning experienced teachers comprised as much as 3.5 percent (unweighted average) of classroom teachers in both 1986-87 and 1987-88. Again, conclusions based on this data should be considered very speculative.

Teacher Retirement. Approximately 34 states reported retirement figures for either 1985-86 or 1986-87, as shown in Table III-6. The average retirement rate (unweighted) decreased between the two years from 2.4 percent to 2.2 percent, ranging from a low of 1.3 percent in North Dakota in 1986-87 to 4.6 percent in Louisiana. The number of retirements grew by more than 20 percent in a single year in Hawaii, Louisiana and Maryland. More than half of the states reported a decline in the number of retirements.

Interstate comparisons should be considered strictly speculative because most state retirement systems cannot distinguish between retirees who had been classroom teachers the previous year, and all other entrants to the retirement system. Other entrants could include former teachers newly eligible to draw retirement benefits and nonteaching professional personnel including administrators. Some teachers are eligible to draw retirement benefits in two or more states.

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TABLE III-1

ACTUAL AVERAGE BEGINNING BA TEACHER SALARY, 1986-87 AND 1987-88

State	Beginning Salary 1987-88	Average Salary 1987-88	Beginning/ Average Salary	Beginning Salary 1986-87*	Increase in: Beginning Salary	Increase in: Average Salary
Alabama	$18,200 b	$23,201 a	78.4%	$18,200 b	0.0%	-1.3%
Alaska	26,880	40,510	66.4%	26,000 b	3.4%	-3.7%
Arizona	19,300 b	27,388	70.5%	18,000 b	7.2%	5.5%
Arkansas	15,996	20,340	78.6%	15,891	0.7%	2.2%
California	21,900 a	33,200 a	66.0%	20,780	5.4%	6.2%
Colorado	16,813	28,651	58.7%	16,090	4.5%	4.6%
Connecticut	20,703	33,776	61.3%	19,369	6.9%	15.8%
Delaware	19,100 b	29,573	64.6%	17,758	7.6%	7.7%
D.C.	19,116	34,705	55.1%	18,879	1.3%	2.7%
Florida	19,500 b	25,198	77.4%	18,173	7.3%	5.7%
Georgia	19,400 b	25,736	75.4%	18,600 b	4.3%	4.5%
Hawaii	18,698	28,445	65.7%	17,607	6.2%	9.0%
Idaho	14,793	22,242	66.5%	14,246	3.8%	3.6%
Illinois	17,804 a	29,716 a	59.9%	16,972	4.9%	5.3%
Indiana	17,300 b	27,067 a	63.9%	16,254	6.4%	5.7%
Iowa	18,721	24,867	75.3%	15,428	21.3%	10.0%
Kansas	17,377	24,647	70.5%	16,371	6.1%	5.1%
Kentucky	16,150	24,274	66.5%	15,250	5.9%	8.0%
Louisiana	14,966 a	21,209	70.6%	14,966	0.0%	0.1%
Maine	15,863	23,425	67.7%	14,229	11.5%	10.2%
Maryland	19,478	30,933	63.0%	17,140	13.6%	7.1%
Massachusetts	18,800 b	30,800 b	61.0%	17,600 b	6.8%	6.5%
Michigan	20,100 b	34,050 b	59.0%	18,700 b	7.5%	8.0%
Minnesota	19,625 a	29,756 a	66.0%	18,687	5.0%	5.0%
Mississippi	16,600 b	20,750 a	80.0%	15,400 b	7.8%	6.7%
Missouri	17,717	24,704	71.7%	16,777	5.6%	5.4%
Montana	na	23,774	na	na	na	1.9%
Nebraska	15,595	22,995 b	67.8%	15,116	3.2%	5.5%
Nevada	18,523	27,599	67.1%	17,660	4.9%	2.4%
New Hampshire	17,300 b	24,019	72.0%	15,500 b	11.6%	9.8%
New Jersey	20,500 b	30,788 a	66.6%	19,300 b	6.2%	7.2%
New Mexico	17,897	24,523 a	73.0%	18,153	-1.4%	1.5%
New York	20,650 a	34,300 a	60.2%	19,669	5.0%	7.2%
North Carolina	17,600 b	25,073 ac	70.2%	16,700	5.4%	5.5%
North Dakota	15,218	21,660	70.3%	15,082	0.9%	1.8%
Ohio	16,374	27,606	59.3%	15,765	3.9%	5.0%
Oklahoma	16,432	23,100 a	71.1%	16,409	0.1%	2.4%
Oregon	18,022	28,080	64.2%	17,367	3.8%	5.2%
Pennsylvania	18,400 b	29,177	63.1%	17,100 b	7.6%	6.4%
Rhode Island	17,302	32,858 a	52.7%	16,400	5.5%	5.7%
South Carolina	17,609 a	24,241	72.6%	16,948	3.9%	4.5%
South Dakota	15,020	19,758	76.0%	13,870	8.3%	5.2%
Tennessee	16,970 a	24,748	68.6%	16,086	5.5%	5.2%
Texas	18,800 b	25,387 b	74.1%	18,281	2.8%	2.0%
Utah	15,266	22,783 a	67.0%	15,311	-0.3%	-1.1%
Vermont	14,966	24,507	61.1%	13,877	7.8%	6.1%
Virginia	18,439	27,436 a	67.2%	16,781	9.9%	9.6%
Washington	17,905	27,960 a	64.0%	17,334	3.3%	2.5%
West Virginia	15,055 b	21,736	69.3%	15,055 b	0.0%	1.4%
Wisconsin	18,332	29,206	62.8%	17,362	5.6%	5.0%
Wyoming	19,000 b	27,926	68.0%	18,679	1.7%	-1.1%
Weighted Average	$18,557	$28,085	66.1%	$17,604	5.4%	5.5%
Guam	19,217	27,713	69.3%	19,217	0.0%	6.1%
Puerto Rico	8,600	11,700	73.5%	7,600	13.2%	6.4%
Virgin Islands	15,722	18,682	84.2%	15,722	0.0%	0.0%

a=preliminary or estimate; b=AFT estimate; c=median

TABLE III-2

BEGINNING TEACHER SALARIES AND EXPECTED SALARIES OF COLLEGE GRADUATES TO BE HIRED

	1972 ******	1974 ******	1976 ******	1978 ******	1980 ******	1982 ******	1984 ******	1986 ******	1987 ******	1988 ******
Teaching	$6,970	$8,058	$9,085	$10,062	$11,676	$13,539	$15,482	$17,667	$18,657	$19,683
Engineering	10,608	11,556	13,980	16,680	20,136	25,128	26,844	28,512	28,932	29,820
Accounting	10,356	11,040	12,396	13,464	15,720	18,876	20,172	21,216	22,512	24,324
Sales/Marketing	8,904	9,864	11,316	12,636	15,936	18,072	19,620	20,688	20,232	22,848
Business Admin.	8,568	9,000	10,224	12,048	14,100	17,940	19,416	21,324	21,972	22,920
Liberal Arts	8,328	8,892	10,020	11,400	13,296	16,956	19,344	21,060	20,508	22,596
Chemistry	9,840	10,200	11,928	14,700	17,124	21,552	24,192	24,264	27,048	25,692
Math or Statistics	9,276	10,680	12,384	13,632	17,604	20,892	22,416	23,976	25,548	26,112
Economics/Finance	9,240	10,176	10,644	12,072	14,472	18,564	20,484	22,284	21,984	23,136
Computer Science		9,672		14,160	17,712	22,068	24,864	26,172	26,280	27,372
Others	9,264	10,344	11,820	13,848	17,544	20,460	23,136	26,724	21,948	26,316

BEGINNING TEACHER SALARIES AND EXPECTED SALARIES OF COLLEGE GRADUATES TO BE HIRED (1988 DOLLARS)

	1972 ******	1974 ******	1976 ******	1978 ******	1980 ******	1982 ******	1984 ******	1986 ******	1987 ******	1988 ******
Teaching	19,739	19,314	18,864	18,239	16,735	16,608	17,618	19,045	19,403	$19,683
Engineering	30,042	27,698	29,027	30,235	28,860	30,824	30,547	30,736	30,089	29,820
Accounting	29,328	26,461	25,738	24,406	22,531	23,155	22,955	22,871	23,412	24,324
Sales/Marketing	25,216	23,643	23,496	22,905	22,840	22,168	22,327	22,302	21,041	22,848
Business Admin.	24,265	21,572	21,229	21,839	20,209	22,006	22,094	22,987	22,851	22,920
Liberal Arts	23,585	21,313	20,805	20,665	19,057	20,799	22,012	22,703	21,328	22,596
Chemistry	27,867	24,448	24,767	26,646	24,543	26,437	27,529	26,157	28,130	25,692
Math or Statistics	26,270	25,598	25,713	24,710	25,231	25,628	25,508	25,846	26,570	26,112
Economics/Finance	26,168	24,390	22,101	21,883	20,742	22,772	23,310	24,022	22,863	23,136
Computer Science		23,182		25,668	25,386	27,070	28,294	28,213	27,331	27,372
Others	26,236	24,793	24,542	25,102	25,145	25,098	26,328	28,809	22,826	26,316

* estimated to be a 5.5 percent increase.

(Table III-2 Continued)

RATIO OF EXPECTED SALARIES OF COLLEGE GRADUATES TO BE HIRED TO BEGINNING TEACHERS SALARIES

	1972 ******	1974 ******	1976 ******	1978 ******	1980 ******	1982 ******	1984 ******	1986 ******	1987 ******	1988 ******
Teaching	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Engineering	1.52	1.43	1.54	1.66	1.72	1.86	1.73	1.61	1.55	1.52
Accounting	1.49	1.37	1.36	1.34	1.35	1.39	1.30	1.20	1.21	1.24
Sales/Marketing	1.28	1.22	1.25	1.26	1.36	1.33	1.27	1.17	1.08	1.16
Business Admin.	1.23	1.12	1.13	1.20	1.21	1.33	1.25	1.21	1.18	1.16
Liberal Arts	1.19	1.10	1.10	1.13	1.14	1.25	1.25	1.19	1.10	1.15
Chemistry	1.41	1.27	1.31	1.46	1.47	1.59	1.56	1.37	1.45	1.31
Math or Statistics	1.33	1.33	1.36	1.35	1.51	1.54	1.45	1.36	1.37	1.33
Economics/Finance	1.33	1.26	1.17	1.20	1.24	1.37	1.32	1.26	1.18	1.18
Computer Science		1.20		1.41	1.52	1.63	1.61	1.48	1.41	1.39
Others	1.33	1.28	1.30	1.38	1.50	1.51	1.49	1.51	1.18	1.34

ANNUAL PERCENT INCREASE IN BEGINNING TEACHER SALARIES AND EXPECTED SALARIES OF COLLEGE GRADUATES TO BE HIRED

	1974 ******	1976 ******	1978 ******	1980 ******	1982 ******	1984 ******	1986 ******	1987 ******	1988 ******
Teaching	7.0%	5.5%	5.7%	9.6%	7.5%	8.4%	5.8%	5.6%	5.5%
Engineering	6.4%	9.7%	11.9%	10.1%	12.3%	4.0%	6.1%	1.5%	3.1%
Accounting	2.0%	4.3%	5.2%	6.6%	11.2%	3.6%	2.9%	6.1%	8.0%
Sales/Marketing	2.2%	9.4%	7.7%	21.7%	4.9%	5.2%	0.3%	-2.2%	12.9%
Business Admin.	3.9%	4.7%	13.2%	4.7%	10.7%	4.6%	7.2%	3.0%	4.3%
Liberal Arts	2.3%	7.6%	9.7%	4.3%	10.3%	5.9%	11.9%	-2.6%	10.2%
Chemistry	0.8%	7.1%	10.6%	8.3%	10.3%	8.3%	0.2%	11.5%	-5.0%
Math or Statistics	11.8%	4.0%	8.7%	21.7%	12.3%	3.3%	5.6%	6.6%	2.2%
Economics/Finance	7.3%	-3.1%	6.7%	10.7%	10.0%	3.8%	6.3%	-1.3%	5.2%
Computer Science				14.8%	8.4%	7.1%	8.3%	0.4%	4.2%
Others	6.7%	13.0%	11.8%	20.5%	2.2%	9.4%	21.6%	-17.9%	19.9%

Figure 10

Trends in Beginning Salaries for College Graduates in Selected Occupations (1988 Dollars)

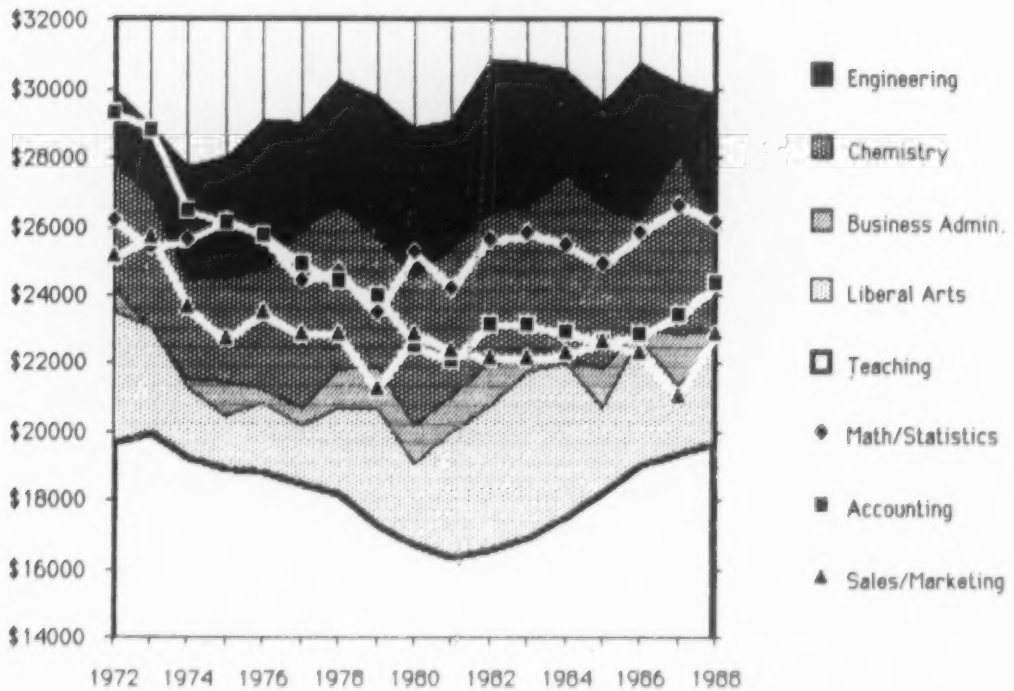

Table III-3

REGIONAL COMPARISON OF SALARIES FOR BEGINNING TEACHERS AND THE MAJOR OCCUPATIONS OF RECENT BA GRADUATES

	National	West	South-West	Rocky Mountain	South	Midwest	Mid-Atlantic	Eastern
Beginning Teacher	$18,657	$20,748	$18,585	$17,682	$17,820	$18,121	$19,459	$18,438
Accounting	23,412	21,924	23,460	22,500	23,316	23,844	24,960	23,460
Management Trainee	19,476	18,780	19,692	18,480	20,340	19,836	21,348	19,692
Computer Scientist	26,484	27,804	27,216	26,304	26,148	25,968	27,420	27,216
Retail/Wholesale Sales	21,036	22,164	22,488	20,544	17,100	20,904	21,072	22,488
Engineering	28,836	29,028	28,680	28,236	28,104	29,100	27,948	28,680
RATIO TO THE SALARY OF A BEGINNING TEACHER								
Beginning Teacher	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Accounting	1.25	1.06	1.26	1.27	1.31	1.32	1.28	1.27
Management Trainee	1.04	0.91	1.06	1.05	1.14	1.09	1.10	1.07
Computer Scientist	1.42	1.34	1.46	1.49	1.47	1.43	1.41	1.48
Retail/Wholesale Sales	1.13	1.07	1.21	1.16	0.96	1.15	1.08	1.22
Engineering	1.55	1.40	1.54	1.60	1.58	1.61	1.44	1.56
PERCENT INCREASE FROM PREVIOUS YEAR								
Beginning Teacher	6.2%	5.7%	3.0%	4.2%	5.2%	6.8%	8.5%	7.3%
Accounting	8.3%	7.9%	2.6%	6.4%	9.1%	9.3%	17.2%	10.3%
Management Trainee	2.2%	-0.7%	5.7%	1.7%	2.5%	0.9%	13.2%	0.8%
Computer Scientist	-0.2%	4.6%	-0.4%	1.4%	2.8%	-1.6%	2.2%	-3.6%
Retail/Wholesale Sales	5.2%	13.3%	9.7%	5.5%	-13.5%	2.1%	2.9%	-1.4%
Engineering	3.0%	4.6%	2.4%	2.1%	0.9%	2.8%	0.9%	-0.1%

Data Sources: Educational Research Service and College Placement Council

Regional Comparison of Beginning Teacher Salaries to the Average Salary Offer of Bachelor Degree Candidates in Selected Fields

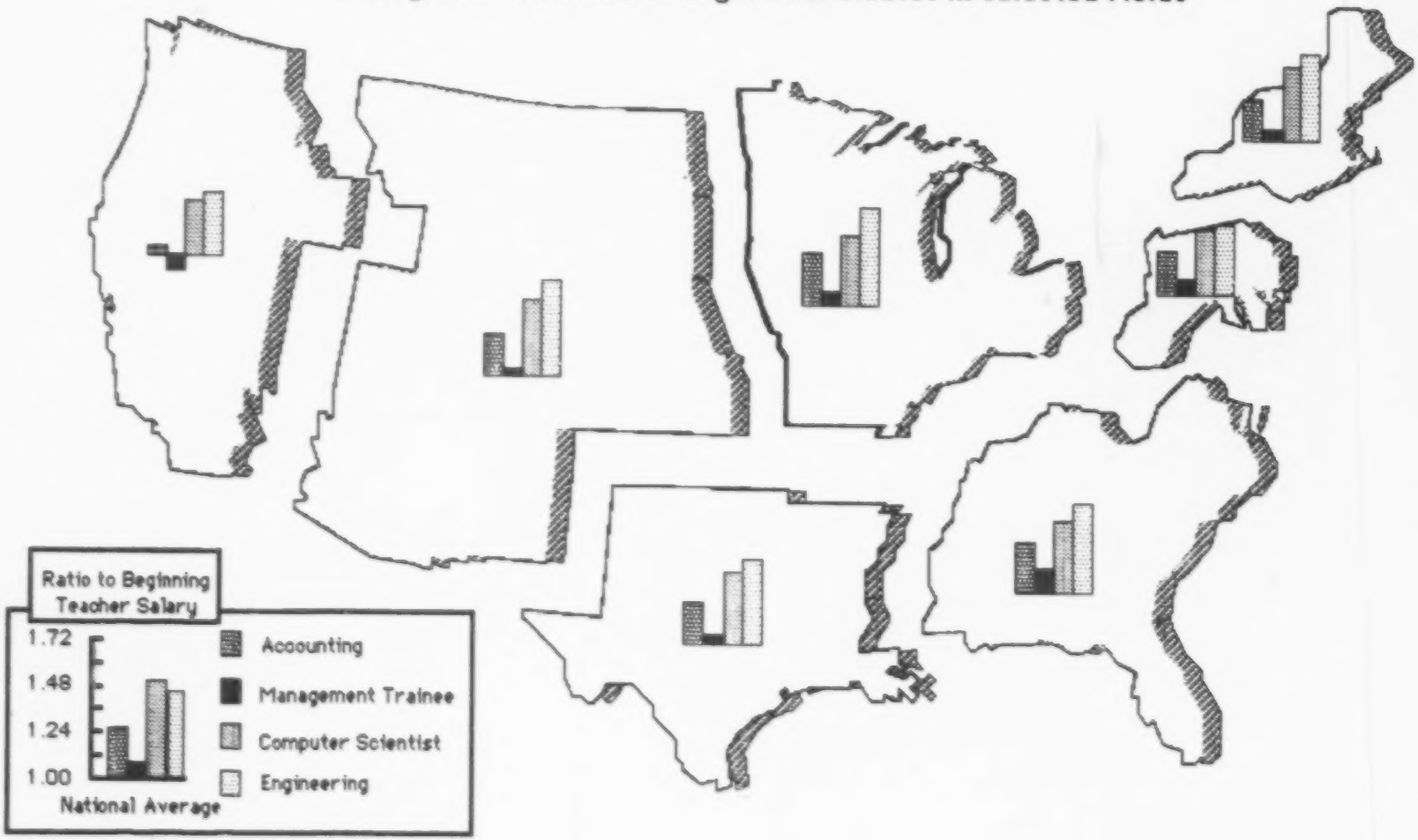

TABLE III-4

NEW HIRES ENTERING TEACHING FOR THE FIRST TIME FOR STATES REPORTING DATA

	Beginning Teachers			Percent of Classroom Teachers	
	1986-87	1987-88	Percent Change	1986-87	1987-88
Arkansas	1,215	1,395	14.8%	4.9%	5.6%
California	8,730	9,000 a	3.1%	4.6%	4.6%
Connecticut	543	371	-31.7%	1.4%	1.0%
Delaware	134	na		2.3%	
D.C.	312	258 a	-17.3%	5.2%	4.1%
Florida	5,129	5,233	2.0%	5.6%	5.5%
Hawaii	549	na		6.0%	
Idaho	459	519	13.1%	4.5%	5.1%
Illinois	2,883	2,641	-8.4%	2.8%	2.5%
Indiana	999	962	-3.7%	1.9%	1.8%
Iowa	620	577	-6.9%	2.1%	1.9%
Kansas	890	503	-43.5%	3.3%	1.8%
Kentucky	1,317	1,297	-1.5%	3.8%	3.6%
Louisiana	1,433	1,718	19.9%	3.4%	4.1%
Maine	517	558	7.9%	3.9%	4.1%
Maryland	1,071	1,127 a	5.2%	2.7%	2.8%
Minnesota	1,506	1,630	8.2%	3.6%	3.9%
Mississippi	681	na		2.6%	
Missouri	2,012	2,066	2.7%	4.1%	4.2%
Nebraska	710	767	1.1%	4.1%	4.5%
New Jersey	978	905 a	-7.5%	1.3%	1.2%
New York	4,735	5,100 a	7.7%	2.8%	2.9%
North Dakota	164	185	12.8%	2.1%	2.4%
Ohio	2,518	2,613	3.8%	2.5%	2.6%
Oklahoma	2,256	na		5.7%	
Oregon	910	850	-6.6%	3.4%	3.2%
Pennsylvania	1,900 a	1,900 a	0.0%	1.8%	1.8%
South Dakota	334	419	25.4%	4.2%	5.0%
Tennessee	1,688	1,524	-9.7%	3.5%	3.1%
Texas	9,867	na		5.3%	
Virginia	940 a	847	-9.9%	1.5%	1.3%
Washington	793	831	4.8%	2.1%	2.2%
West Virginia	1,029	767	-25.5%	4.5%	3.4%
Wisconsin	1,563	1,584	1.3%	3.3%	3.3%
Unweighted Average				3.4%	3.1%

a=estimated or preliminary

TABLE III-5

EXPERIENCED TEACHERS REENTERING TEACHNG FOR STATES REPORTING DATA

	Reentering Teachers			Percent of Classroom Teachers		Percent of New Hires*	
	1986-87	1987-88	Percent Increase	1986-87	1987-88	1986-87	1987-88
Arkansas	656	663	1.1%	2.6%	2.6%	35.1%	32.2%
Connecticut	1,575 i	1,472 i	-6.5%	4.2%	3.8%	51.2%	52.4%
Delaware	196	na		3.4%		59.4%	
D.C.	250	na		4.2%		44.5%	
Hawaii	101	na		1.1%		15.5%	
Illinois	4,589	3,589	-21.8%	4.4%	3.4%	61.4%	57.6%
Indiana	1,367 i	873 i	-36.1%	2.6%	1.6%	57.8%	47.6%
Kansas	na	423			1.6%		45.7%
Kentucky	1,540	1,986	29.0%	4.5%	5.6%	53.9%	60.5%
Maryland	1,651	1,983 a	20.1%	4.2%	4.9%	60.7%	63.8%
Minnesota	1,039	967	-6.9%	2.5%	2.3%	40.8%	37.2%
Missouri	2,671	2,363	-11.5%	5.5%	4.8%	57.0%	53.4%
New Jersey	3,158	3,026 a	-4.2%	6.4%	6.1%	76.4%	77.0%
New York	11,796	11,945 a	1.3%	6.9%	6.8%	71.4%	70.1%
North Dakota	176	464	163.6%	0.3%	0.8%	51.8%	71.5%
Ohio	4,480	4,194	-6.4%	4.5%	4.2%	64.0%	61.6%
Oregon	1,221 h	1,179 h	-3.4%	4.6%	4.4%	57.3%	58.1%
South Dakota	309	342	10.7%	3.9%	4.1%	48.1%	44.9%
Washington	823 i	814 i	-1.1%	2.2%	2.1%	50.9%	49.5%
West Virginia	285	123	-56.8%	1.2%	0.5%	21.7%	13.8%
Wisconsin	346	na		0.7%		18.1%	
Unweighted Average			4.4%	3.5%	3.5%	49.8%	52.8%

a=preliminary or estimate.
h=includes transfers from other districts
i=transfers from private schools, out of state and other districts not included.

Table III-6

NEW HIRES ENTERING TEACHING FOR THE FIRST TIME FOR STATES REPORTING DATA

	Retiring Teachers			Percent of Classroom Teachers*	
	1985-86	1986-87	Percent Increase	1985-86	1986-87
Arkansas	748	693	-7.4%	3.0%	2.8%
California	5727	6467	12.9%	3.0%	3.3%
Connecticut	777	768	-1.2%	2.1%	2.0%
D.C.	217	98	-54.8%	3.6%	1.6%
Florida	1305	1498	14.8%	1.4%	1.6%
Georgia	na	2200			3.7%
Hawaii	216	262	21.3%	2.4%	2.8%
Idaho	198	190	-4.0%	1.9%	1.9%
Illinois	1798	1785	-0.7%	1.7%	1.7%
Indiana	1012	1078	6.5%	1.9%	2.0%
Kansas	699 a	na		2.6%	
Kentucky	936	814	-13.0%	2.7%	2.3%
Louisiana	1589	1944	22.3%	3.8%	4.6%
Maine	183	192	4.9%	1.4%	1.4%
Maryland	442 a	581	31.4%	1.1%	1.4%
Minnesota	1093	1069	-2.2%	2.6%	2.5%
Mississippi	351	na		1.3%	
Montana	242	na		2.5%	
New Jersey	1003	1075 a	7.2%	1.3%	1.4%
New York	5338	na		3.1%	
North Carolina	1634	na		2.8%	
North Dakota	214	100	-53.3%	2.8%	1.3%
Ohio	3753 j	3096 j	-17.5%	3.8%	3.1%
Oregon	597	609	2.0%	2.2%	2.3%
Pennsylvania	1909 j	1562 j	-18.2%	1.9%	1.5%
Rhode Island	219	na		2.5%	
South Dakota	165	148	-10.3%	2.1%	1.8%
Tennessee	933	818	-12.3%	1.9%	1.7%
Texas	7676	6112	-20.4%	4.1%	3.3%
Vermont	132	133	0.8%	2.2%	2.1%
Virginia	1568 f	1624 f	3.6%	2.5%	2.5%
Washington	868 j	907 j	4.5%	2.3%	2.4%
West Virginia	477	470	-1.5%	2.1%	2.1%
Wyoming	856	721	-15.8%	1.8%	1.5%
Unweighted Average			-3.7%	2.4%	2.2%

*Figures may be inflated because teacher retirement systems usually include all instructional personnel, not just classroom teachers.

a=preliminary or estimate; f=calander year; j=all personnel in retirement system, not just teachers.

Appendix A

State Education Data, 1986-87 and 1987-88

State	Avg.Sal 1986-87	Avg.Sal 1987-88	Teachers 1986-87	Teachers 1987-88	Pupils 1986-87	Pupils 1987-88	$/Pupil 1986-87	Min.Sal. 1986-87	Min.Sal. 1987-88	New Teachers 1986-87	New Teachers 1987-88	Re-entering Teachers 1986-87	Re-entering Teachers 1987-88	Teachers Retiring 1985-86	Teachers Retiring 1986-87
1 Alabama	23,500	23,201 a	36,980	37,700 d	733,735 d	729,000 d	2,500 b	18,298 b	18,200 b	NA	NA	NA	NA	NA	NA
2 Alaska	42,063	40,510	6,448 d	6,227	103,792	102,161	6,792	26,000 b	26,880	NA	NA	NA	NA	NA	NA
3 Arizona	25,972	27,388	29,128	30,733	549,422	564,110	2,971 b	18,200 b	19,300 b	NA	NA	NA	NA	NA	NA
4 Arkansas	19,904	20,340	24,901	25,052	437,438	437,036	2,750 b	15,896	15,996	1,215	1,395	656	663	748	693
5 California	31,276	33,200 a	189,978	195,474 a	4,377,989	4,488,398	3,787	20,780	21,900 a	8,730	9,000 a	NA	NA	5,727	6,467
6 Colorado	27,387	28,651	30,705	31,168	558,415	560,236	3,814	16,090	16,813	NA	NA	NA	NA	NA	NA
7 Connecticut	29,170	33,776	37,506	38,394	473,015	468,325	5,400 b	19,369	20,703	543	371	1,575 i	1,472 i	777	768
8 Delaware	27,467	29,573	5,831	5,900	94,410	95,659	4,493	17,758	19,100 b	134	NA	196	NA	NA	NA
9 D.C.	33,797	34,705	6,019	6,303	86,893	87,955	5,200 b	18,879	19,116	132 a	258 a	250	NA	217	98
10 Florida	23,833	25,198	91,969 d	95,876 d	1,607,320	1,664,774 d	3,500 b	18,173	19,500 b	5,129	5,233	NA	NA	1,305	1,498
11 Georgia	24,632	25,736	58,019	59,666	1,097,578	1,110,947	3,067	18,600 b	19,400 b	NA	NA	NA	NA	NA	2,200
12 Hawaii	26,093	28,445	9,165	9,359	164,064	165,910	3,850 b	17,607	18,698	549	NA	101	NA	216	262
13 Idaho	21,476	22,242	10,234	10,258	211,360	212,444	2,500 b	14,246	14,793	459	519	NA	NA	198	190
14 Illinois	28,212	29,716 a	104,609	105,217	1,825,185	1,811,446	3,587 b	16,972	17,804 a	2,883	2,641	4,589	3,589	1,798	1,785
15 Indiana	25,616	27,067 a	52,626	53,541	964,885	962,653	3,330 b	16,254	17,300 b	999	962	1,367	873 i	1,012 i	1,078
16 Iowa	22,615	24,867	30,141	30,011	481,286	480,826	3,509 b	15,428	18,721	620	577	NA	NA	NA	NA
17 Kansas	23,459	24,647	27,035	27,287	416,091	421,112	3,511	16,371	17,377	890	503	NA	423	699 a	NA
18 Kentucky	22,467	24,274	34,351	35,674	642,778	642,696	2,436 b	15,250	16,150	1,317	1,297	1,540	1,986	936	814
19 Louisiana	21,196	21,209	42,019	42,000	791,631	786,637	2,799	14,966	14,966 a	1,433	1,718	NA	NA	1,589	1,944
20 Maine	21,257	23,425	13,221	13,512	207,349	207,316	3,666	14,229	15,863	517	558	NA	NA	183	192
21 Maryland	28,893	30,933	39,531	40,093	657,747	683,797	4,301	17,140	19,478	1,071	1,127 a	1,651	1,983 a	442 a	581
22 Massachusetts	28,922	30,800 b	58,066 d	58,066 h	833,918 d	833,918 h	4,400 b	17,600 b	18,800 b	NA	NA	NA	NA	NA	NA
23 Michigan	31,528	34,050 b	83,130 d	80,000 d	1,681,880 d	1,606,000 d	3,900 b	18,700 b	20,100 b	NA	NA	NA	NA	NA	NA
24 Minnesota	28,339	29,756 a	41,445	42,132	711,084 a	721,455	4,018	18,687	19,625 a	1,506	1,630	1,039	967	1,093	1,069
25 Mississippi	19,448	20,750 a	26,217	26,847 a	496,241	493,900 d	2,410 e	15,400 b	16,600 b	681	NA	NA		351	NA
26 Missouri	23,435	24,704	48,972	49,632	800,606	802,060	3,013	16,777	17,717	2,012	2,066	2,671	2,363	NA	NA
27 Montana	23,340	23,774	9,817	9,659	153,327	152,207	3,746 b	NA	NA	NA	NA	NA	NA	242	NA
28 Nebraska	21,797 a	22,995 b	17,214	17,228	266,604	267,601	3,654 b	15,116	15,595	710	767	NA	NA	NA	NA
29 Nevada	26,962	27,599	7,908 i	8,348	161,239	168,353	3,361 b	17,660	18,523	NA	NA	NA	NA	NA	NA
30 New Hampshire	21,869	24,019	10,300	10,363	163,717	166,045	3,514 b	15,500 b	17,300 b	NA	NA	NA	NA	NA	NA
31 New Jersey	28,718	30,788 a	75,558	75,487 a	1,102,663	1,089,000 a	5,572 b	19,300 b	20,500 b	978	905 a	3,158	3,026 a	1,003	1,075 a

State	Avg.Sal 1986-87	Avg.Sal 1987-88	Teachers 1986-87	Teachers 1987-88	Pupils 1986-87	Pupils 1987-88	$/Pupil 1986-87	Min.Sal. 1986-87	Min.Sal. 1987-88	New Teachers 1986-87	New Teachers 1987-88	Re-entering Teachers 1986-87	Re-entering Teachers 1987-88	Teachers Retiring 1985-86	Teachers Retiring 1986-87
32 New Mexico	24,155	24,523 a	14,650	14,731 a	270,770	275,529 a	3,038 b	18,153	17,897	NA	NA	NA	NA	NA	NA
33 New York	32,000 c	34,300 a	171,890	174,550	2,588,936	2,577,515 a	5,716 a	19,669	20,650 a	4,735	5,100 a	11,796	11,945 a	5,338	NA
34 North Carolina	23,775	25,073 a	58,063	59,718	1,079,248	1,079,370	2,980 b	16,700	17,600 b	NA	NA	NA	NA	1,634	NA
35 North Dakota	21,284	21,660	7,738	7,655	118,094	118,474	3,192 b	15,082	15,218	164	185	176	464	214	100
36 Ohio	26,288	27,606	98,893	99,641	1,793,260	1,793,241	3,454	15,765	16,374	2,518	2,613	4,480	4,194	3,753 j	3,096 j
37 Oklahoma	22,563	23,100 a	39,653	39,000 a	588,223	584,212	2,876	16,409	16,432	2,256	NA	NA	NA	NA	NA
38 Oregon	26,691	28,080	26,613	26,941	449,307	455,895	3,883 b	17,367	18,022	910	850	1,221 h	1,179 h	597	609
39 Pennsylvania	27,422	29,177	102,993	103,307	1,674,161	1,668,542	4,278 b	17,100 b	18,400 b	1,900 a	1,900 a	NA	NA	1,909 j	1,562 j
40 Rhode Island	31,079	32,858 a	8,740	8,947 a	134,147	134,064	4,648	16,400	17,302	NA	NA	NA	NA	219	NA
41 South Carolina	23,201	24,241	34,881	35,444	611,978	616,440	3,013 b	16,948	17,60 a	NA	NA	NA	NA	NA	NA
42 South Dakota	18,781	19,758	8,002	8,339	124,362	126,450	2,892	13,870	15,020	334	419	309	342	165	148
43 Tennessee	23,526	24,748	48,198	49,037	818,506	822,146	2,774 b	16,086	16,970 a	1,688	1,524	NA	NA	933	818
44 Texas	24,890	25,387 b	186,358	187,200 d	3,209,515	3,236,867	3,316	18,281	18,800 b	9,867	NA	NA	NA	7,676	6,112
45 Utah	23,035	22,783 a	17,122	17,100 d	415,994	423,386	2,242	15,311	15,266	NA	NA	NA	NA	NA	NA
46 Vermont	23,089	24,507	6,005	6,327	91,720	92,755 a	4,123 b	13,877	14,966	NA	NA	NA	NA	132	133
47 Virginia	25,041	27,436 a	63,635	65,086 a	974,754	979,110	3,708	16,781	18,439	940 a	847	NA	NA	1,568 f	1,624 f
48 Washington	27,285	27,960 a	37,127	37,935 a	761,847	775,881 a	3,725 b	17,334	17,905	793	831	823 i	814 i	868 j	907 j
49 West Virginia	21,446	21,736	22,931	22,702	351,837	344,604	3,523 b	15,055 b	15,055 b	1,029	767	285	123	477	470
50 Wisconsin	27,815	29,206	47,039	47,721	767,819	772,363	4,167 b	17,362	18,332	1,563	1,584	346	NA	856	721
51 Wyoming	28,230	27,926	6,273	5,918	100,955	98,455	5,018	18,679	19,000 b	NA	NA	NA	NA	NA	NA
U.S. Avg./Total	$26,615	$28,085	2,265,848	2,294,505	39,779,096	39,959,275	3,713	$17,604	$18,557						
52 Guam	26,117	27,713	1,411	1,389	25,294	25,557	2,673	19,217	19,217	76	59	150	100	4	14
53 Puerto Rico	11,000	11,700	32,664	33,069	679,489	672,837	1,235	1,335	NA	NA	NA	NA	NA	901	911
54 Virgin Islands	18,862	18,862	1,606	NA	24,435	NA	3,395	15,722	15,722	NA	NA	NA	NA	NA	

Footnotes:

a=preliminary or estimate
b=AFT estimate
c=median
d=U.S. Depatment of Education data
f=calander year data
h=includes transfers from other districts
i=transfers from private schools, out-of-state and other districts not included
j=Includes all in retirement system, not just teachers

APPENDIX B

Data Sources

All data comes from the annual AFT Teacher Salary Report, except as noted below.

Table I-4

U.S. Department of Labor, Employment and Wages, Annual Averages 1986, November, 1987.

Data Resources, Inc., Regional Information Service, Regional Overview, Spring, 1988 (used to estimate private sector annual earnings for 1987 and 1988).

U.S. Department of Labor, Employment and Wages, Annual Averages 1981, November 1982.

Table I-5

U.S. Bureau of Economic Analysis, Survey of Current Business, April, 1988.

Table I-6

Technical documentation for the AFT cost-of-living index is available from the AFT Research Department. The methodology supporting the AFT index is in: Walter W. McMahon and Carroll Melton, "Measuring Cost of Living Variation," Industrial Relations, Vol. 17, No. 3, p.331.

Table I-7

U.S. Department of Education, "Public School Revenues and Current Expenditures, 1985-86: Final Tabulations" E.D. TABS, December 1987.

Table I-8

U.S. Department of Education, Center for Education Statistics, Public Elementary and Secondary Education in the United States 1982-83 and 1983-84: A Statistical Compendium, June 1987.

U.S. Bureau of the Census, Public Employment in 1983, U.S. Government Printing Office, Washington, D.C. 1984.

Table II-1

U.S. Bureau of Economic Analysis, The National Income and Product Accounts of the United States 1929-82 and July issues of Survey of Current Business.

U.S. Bureau of the Census, Historical Statistics, Colonial Times to 1970, series D739-764 and D893-904.

National Center of Educational Statistics, Digest of Education Statistics, various issues (used to estimate teacher salaries prior to the 1977-78 school year).

U.S. Department of Labor, Handbook of Labor Statistics, June 1985; recent issues of U.S. Department of Labor, Monthly Labor Review.

U.S. Department of Labor, recent issues of Current Wage Developments, (used to estimate average annual earnings for 1987).

Table II-2

National Center for Educational Statistics, Digest of Education Statistics, various issues (used to estimate teacher salaries prior to the 1977-78 school year).

U.S. Bureau of the Census, Current Population Reports, series P-60.

Table II-3

U.S. Department of Labor, Handbook of Labor Statistics, June 1985.

U.S. Department of Labor, National Survey of Professional, Administrative, Technical and Clerical Pay, March 1987, October 1987.

American Association of University Professors, data derived from the Annual Reports on the "Economic Status of the Profession," published in Academe. (Various years, usually the March-April issues).

Table II-4

Educational Research Service, Salaries Paid Professional Personnel in Public Schools, and Wages and Salaries Paid Support Personnel in Public Schools, ERS: Reston, VA, editions since 1973-74.

Table III-2

Victor Lindquist, The Northwestern Endicott Report, Northwestern University: Evanston, IL, editions since 1973.

Table III-3

College Placement Council, CPC Salary Survey, Regional Interim Report No. 1, CPC: Bethlehem, PA, February 1988.

Educational Research Service, Salaries Paid Professional Personnel in Public Schools 1986-87, ERS: Reston, VA, 1988.

Figure 3

National Center for Educational Statistics, Condition of Education, 1983 Edition, 1983.

Various polls by Louis Harris and Associates for the Metropolitan Life Insurance Company including, "The American Teacher 1987: Strengthening Links Between Home and School."

Figure 7

U.S. Department of Labor, Bureau of Labor Statistics, Unpublished Tabulations From the Current Population Survey, 1987 Annual Averages.